

ENGAGING STAKEHOLDERS IN ASSESSING AND ADDRESSING
THEIR OWN NEEDS: PLANNING AND IMPLEMENTING PARTICIPATORY
AGRICULTURAL DEVELOPMENT IN ST. LUCIA AND DOMINICA

By

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Abstract of Dissertation Presented to the Graduate School
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NEEDS: AN EXPLORATION OF PLANNING AND IMPLEMENTING
PARTICIPATORY AGRICULTURAL DEVELOPMENT
IN ST. LUCIA AND DOMINICA

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In this dissertation, concepts and frameworks from participatory development and gendered political ecology were used in combination with qualitative research methods to explore factors affecting design and delivery of participatory agricultural development projects in St. Lucia and Dominica. In order to understand the influence of site-specific context on project planning and implementation, this study examined the gendered political ecologies of the project settings as well as decision-making and interactions within and among stakeholder groups.

An existing framework was used to examine how the combination of historical, political, socioeconomic, cultural and ecological factors enhances or constrains the potential for participatory development. Tracing the evolution of each of these factors from European settlement of St. Lucia and Dominica through the spread of

globalization in the 1990s set the stage for the development projects analyzed in this study.

A project analysis framework was developed for organizing data and analyzing decision-making within each project according to specific phases they had in common. Data were analyzed to determine who made decisions, and how these decisions impacted stakeholders in each project including farmers, extension officers, government officials, representatives from the sponsoring agency, and consultants, including the researcher. Following an overall assessment of both projects, results from specific phases of each were compared to determine if and how different approaches to project planning and implementation affected decision-making and stakeholder participation.

Results suggested that project design for incorporating stakeholder participation in agricultural development must acknowledge the limitations that affect the livelihood choices made by target audiences. These limitations include those externally imposed such as trade restrictions and unsuitability of foreign sourced agricultural inputs, as well as domestic issues such as changing consumer preferences reducing demand for locally produced crops, and unpredictable labor availability. Results also showed that failure to explore and acknowledge stakeholder expectations, at all levels of decision-making, can lead to misunderstanding, misuse of scarce development resources and conflict between stakeholders. The combination of frameworks used in this interdisciplinary study will enable policy makers, practitioners, and others with an interest in participatory development to plan or evaluate projects that acknowledge the interactions between context and process.

CHAPTER 1 INTRODUCTION

Can the world be redefined and reconstructed from the perspective of the multiple cultural and ecological practices that continue to exist among many communities? This is above all a political question, but one that entails serious epistemological, cultural, and ecological considerations. Escobar, 1998, p.76.

Farmers in developing nations like St. Lucia and Dominica carve out a living within a mosaic of biophysical and socioeconomic forces, including environments, bureaucracies, and markets. These farmers choose among livelihood activities and strategies heavily influenced by exogenous factors as illustrated in their historical and present position as producers within an increasingly globalized system. The reality of globalization has recently increased the challenges facing farmers in St. Lucia and Dominica by inducing them to compete in the global marketplace. This dissertation examines participatory agricultural development projects designed to help farmers face these challenges in both countries, and questions how effectively participatory approaches address these challenges.

After three hundred years of colonization and nearly fifty years of aid from foreign governments, international organizations, and institutions, there are problems and symptoms of underdevelopment—poverty, unemployment, emigration, environmental degradation, and limited economic growth. Current thinking in development suggests that simply integrating farmers into the global economy will

improve their situation. However, as Trouillot points out about Dominica, and which can be said of St. Lucia, these Caribbean island nations are not “underdeveloped” due to reliance on subsistence agriculture.

On the contrary: its present condition, including its low material standard of living, is a byproduct of its forced integration within the world economy. Hence, one is likely to wait in vain for the island to take off on the capitalist path: it has been on that path for more than two centuries. (Trouillot, 1988, p. 286)

Harcourt defines development as “a collection of theories (development as economic growth), institutions (Bretton Woods, NGOs [Non-Governmental Organizations]), practices (projects, community, societies), and procedures (programmes, plans) through which individuals and communities are constituted” (1994, p. 22). While this definition indicates elements of the process of development, it does not illuminate the dynamic nature of the global economic web that sees the rich getting richer, and the poor getting poorer, while there is large-scale ecological degradation. The persistence of these conditions has led researchers and practitioners to question theories, approaches, tools, and techniques for reaching target audiences of development.

Early approaches to reaching target audiences were based upon transmission of information and technologies (Rogers, 1995). Rural communities and specific populations (farmers) were seen as backward and in need of an external technological fix. This model was top—down with policy makers establishing targets, researchers identifying problems and developing technical solutions, and field level extension agents delivering them to farmers for adoption (Pickering, 1987; Rogers, 1995). The linear, one-way, relationship between policy makers, researchers, extension, and

farmers left little opportunity for farmers to influence policies, research priorities, and technology delivery.

Attempts to change the top-down nature of research and extension in developing countries spawned a number of approaches including Farming Systems Research and Extension (FSRE), Training and Visit Extension (T & V), Farmer First (FF) and Beyond Farmer First (BFF). These approaches altered the nature of research and extension by changing farmers' position and role in the process, from recipient of information to informant, collaborator, and eventually researcher (Chambers, Pacey and Thrupp, 1989; Collinson, 2000; Waugh, Hildebrand and Andrew, 1989). They also affected the roles of front-line extension staff and their role as the outreach arm of ministries of agriculture. Traditional approaches to development, research, and extension had policy makers and researchers setting targets, designing technologies, and passing them to extension personnel for transmission to farmers.

The emergence of these more participatory approaches coincided with the recognition of women's roles in agriculture in developing countries (see a review in Chapter 2). Central to these approaches was a fundamental change in the role of farmers—their participation in their own development. Ignited in the field, participation has become a common target for development (Chambers, 1997; Collinson, 2000; Feldstein and Poats, 1989; Hayami and Ruttan, 1985).

This research explores factors affecting the design, delivery, and outputs of two participatory agricultural development projects meant to incorporate farmers' perspectives into extension program planning in St. Lucia and Dominica. The implementing agency, the Food and Agriculture Organization of the United Nations,

(FAO), planned the projects to improve service to farmers by bringing them into the processes of assessing and addressing their needs. Front-line extension officers (EOs) were responsible for facilitating this participation and incorporating the results into their strategies for helping farmers. FAO sought to increase farmer participation with extension in terms of problem identification and formulation of solutions.

In contemplating the research for this dissertation, it became apparent that due to a confluence of factors, analysis of project activities without acknowledgement of contextual issues was inadequate. Therefore, an approach was developed that included a multi-disciplinary understanding of the study areas for recognizing, contextualizing, and analyzing as many of those factors and their interrelatedness as possible. The result was a framework that accommodated analysis of processes of project designs and delivery, analysis of stakeholders and their participation in different phases of the projects, and analysis of context as framed by a gendered political ecology. In the global picture within which they operate, this includes an explication of stakeholder expectations from the projects and stakeholder participation in decision-making. It also includes recognition of factors influencing farmers' use of natural resources to sustain themselves and their families within particularly complex social and ecological systems.

Much of the literature on participation in development offers tools to use in the field and techniques for getting target audiences to participate. Few scholars explain how particular approaches relate or lead to particular outcomes. Fewer suggest how to plan for, incorporate, or operationalize participation within site-specific conditions. This study provides links among (1) theoretical approaches to participation; (2)

situation—specific economic, political, social, and ecological conditions; and (3) institutional, practical, and procedural aspects of designing and implementing participatory development projects.

Participation in Development

Although used since the days of Freire (1970), stakeholder participation was not emphasized by mainstream development agencies such as FAO, World Bank, and United States Agency for International Development (USAID) until the early 1990s. Since then, they have encouraged greater involvement or *participation* of stakeholders, namely those historically treated as recipients of foreign aid, who were mainly small-scale, limited—resource populations (Blackburn and Holland, 1998; Chambers, 1998; Slocum and Thomas-Slayter, 1995). Recipients' participation was expected to incorporate their perspectives into creating solutions to their problems. Involving more stakeholders earlier in the process was expected to improve development by generating accurate situational analyses, identifying appropriate target audiences, delivering better technologies, providing more sustainable results, and utilizing scarce resources more efficiently (Chambers, 1997; Clayton, Oakley and Pratt, 1998; Guijt and Shah, 1998; Karl, 2000).

This trend toward 'participatory development' signaled a major shift as it implied a change in the nature of the relationship between donors and recipients. Top-down models of development gave way to more consultative or collaborative approaches to identifying and solving problems where roles and responsibilities could shift according to the needs of expanded lists of stakeholders (Cornwall, 2003; Pritchett and Woolcock, 2004).

Given the persistence of rural poverty in developing countries, a great deal of attention was focused on incorporating farmers' perspectives in the design and delivery of development projects. However, environmental degradation, free trade, and market liberalization had to be considered as additional constraints facing actors (large and small producers, extension staff, and ministries, among others). This left farmers and those institutions designed to assist them with little margin for error.

In reality, farmers in developing countries cover the spectrum from highly diversified subsistence farmers who survive on the food they grow, to highly specialized, mechanized, technology—rich growers. The latter have the ability and resources to change enterprises quickly in response to national policy or market changes. Yet until relatively recently, farmers across the spectrum were all subject to the same top-down development model and (one size fits all) approach (Pickering, 1987; Rogers, 1995).¹

Need for the Study

Integrating participation in agricultural development projects continues to challenge donors, program planners, and practitioners. Participation, a concept that at first glance seems straightforward, quickly becomes complicated when applied to the entire breadth or length of any site-specific effort at planned change. For instance, who participates, what are indicators of participation, or what indicators can be used to measure, monitor, and evaluate participation? A common one is number of participants, yet the number of people involved gives no indication of how they

¹ See, for example, the failure of the Green Revolution to improve the situation of households without access to resources such as fertilizer, herbicides, insecticides, and/or irrigation technology. Green Revolution technologies were designed for and adopted by those resource-endowed farmers who could fit the new production regimes within their existing schemes (Hayami and Ruttan, 1985).

participated. How people participate, perhaps indicated by a list of their activities or their point of entry in a project, gives no indication of why they participated.

Identifying people's activities within a project gives no indication of those with whom they collaborated or conflicted and why, and so on. All of these together may not predict outcomes, success, or sustainability.

While donors, policy makers, researchers, and practitioners continue their search for more effective ways to incorporate participation into development (Chambers, 1998; Pretty, 1995) and develop resources (manuals of tools, techniques, and methods) that explain what participation looks like on the ground, little is understood about the interactions between all players in the process. These interactions, however derived and driven, embody differences in perceptions, decision-making authority, and mode of transmitting and receiving information. Therefore, existing processes need to be examined to determine how best to incorporate these differences.

As currently perceived, participation is focused almost exclusively on the situation of those considered beneficiaries. According to Spring, "beneficiaries are specific groups within an implementation area whose access to and control over resources . . . is actually increased or enhanced" (1993, p. 61). This target audience should be distinguished from participants "who allocate time and/or resources to a project on one or more occasions over its life cycle" (Spring, 1993, p. 61). This distinction deserves exploration in participatory development projects because beneficiaries, target audiences, and participants do not always imply the same people with the same stake or interest in outcomes.

Agricultural development remains a needs-based (versus assets-based) proposition, with participation seen as a means to address a particular symptom of populations in the developing world. Donors encourage planners to include an endogenous perspective early enough in the process to reflect local contexts and needs. Although important, the focus on local actors limits efforts at sustainable agricultural development because it fails to address the heterogeneity of local actors, and their engagement or lack thereof, with other stakeholders in the process (Guijt and Shah, 1998). And until recently, minimal attention was paid to the connection between participants and their ecological, social, political, or economic environments (Martin & Sutherland, 2003; Rocheleau, Thomas-Slayter, and Wangari, 1996; Schmink, 1999). As currently perceived, participation puts the burden of change on local actors without ensuring that other stakeholder groups are willing or able to facilitate this change. Therefore, participation must be understood and explored as a series of context-specific interactions or processes. Within such interactions, participation is affected by power dynamics and patterns of inclusion and exclusion illustrated by communication and decision-making within and between stakeholder groups.

Despite the recent premium put on stakeholder participation in development, much uncertainty remains around the term itself, its potential (why), implementation (how), and implications (outcomes). In *Paradoxes of Participation*, Frances Cleaver claims that participation has become “an act of faith,” with little evidence to back up its claims of improving livelihoods or inducing social change (1999, p. 597). Her critique of participation covers the spectrum from who participates, (how, when, where, and why) to who drives the process. She challenges the widely held belief that participation

by recipients of aid naturally leads to their empowerment, and implies that the term *empowerment* has been co-opted or watered down by its association with participation. Her argument suggests that true empowerment means individual as well as class action with the goal of structural change, reconnecting empowerment with its inherently political nature. However, after years of participation in development there are no new peasant governments or few new or revised institutions whose priorities have been changed to address the needs of the poor as a direct result of their participation (Cleaver, 1999).

This critique suggests issues in need of clarification in participation and development. It is impossible to address all of these issues at once; therefore this study is directed toward a final point raised by Cleaver who argued that there was a need for “analysis of ‘component’ communities and ‘successful’ participatory projects that focus on process, on power dynamics, on patterns of inclusion and exclusion. This would involve more process documentation and analysis of conflict, consensus building and decision—making within communities; not just those activities related to the particular development project at hand” (p. 609). To this critique I would add that further analysis of these component communities must expand to include the larger, multi-faceted realities in which they survive.

Based on the above, this study examines initial components of two specific development projects, one in St. Lucia and one in Dominica, designed to increase farmer participation in extension program planning and delivery. The projects analyzed in this study were meant to change the nature of the relationship between farmers and EOs. After examining historical economic, political, social, and ecological issues, this

study explores stakeholder participation at each step in the projects in order to assess the appropriateness of the participation in that situation. The design and delivery of both projects will be analyzed (using a qualitative, inductive approach) to illustrate differences in decision-making and participation within and between stakeholder groups.

The stakeholders involved in design and delivery of the projects were farmers, front-line EOs, consultants, ministry officials, and representatives of the sponsoring agency. Besides identifying them, it is necessary to situate them within the larger political, economic, ecological, and social processes that shape conditions within these countries (Rocheleau, Thomas-Slayter, and Wangari, 1996; Schmink and Wood, 1987). Hence, exploration of these conditions is a part of this study.

Building a Framework for Examining Context and Process in Participatory Agricultural Development

The theoretical framework for this study combines concepts from literature on (1) political ecology and (2) participation in development. Political ecology is a necessary element of this framework because it incorporates past and present relationships between local cultural dynamics, relations of international exchange, political economy, and the environment (Greenberg and Park, 1994; Schmink and Wood, 1987). The political ecologies of St. Lucia and Dominica set the stage, *or context*, for the development projects analyzed in this study. Participation in development literature contributes to this framework by serving as a microscope for examining observable *processes* between individuals and groups nested within a political ecology framework (Harcourt, 1994; McDougall & Braun, 2003). The brief introduction to key issues presented in this section is further developed in following chapters.

Political ecology is a field of study emphasizing “decision-making processes and the social, political, and economic context that shapes environmental policies and practices” (Rocheleau, Thomas-Slayter, and Wangari, 1996, p. 4). It expands ecological concepts to encompass cultural and political activity “within an analysis of ecosystems that are significantly but not always entirely socially constructed” (Greenberg and Hank, 1994, p. 1). Political ecology explicitly ties together sociopolitical and ecological aspects that set the stage for development. Martinez-Alier supports this point by suggesting “the struggle for survival brings the poor to defend access to resources, and sometimes, their conservation; therefore the ecology of the poor has been very present, both historically and now” (1991, p. 623). Political ecology allows for both the social and ecological questions commonly addressed by development to be examined in relation to each other.

In expanding the scope of inquiry around human/ecological interactions, early political ecologists made no mention of gender. Yet, ecological, economic, and political changes at the international, national, and local levels are known to have differential effects on women and men. Subsequent literature has incorporated both feminism and gender in political ecology to reflect women’s and men’s differential access to, relationships with, perceptions and use of natural resources and the environment (McIlvaine-Newsad, 2000; Rocheleau et al., 1996; Schmink, 1999). By including a gendered political ecology perspective, this study includes a focus on how the politics of power in participation in development impact women and men.

Participation in development can be examined from multiple levels and perspectives. Each stakeholder group—policy makers, donors, researchers,

practitioners, and subjects—conceives of participation differently depending on their experience and expectations. Feminist theory plays a role in understanding complexities of participation. Starting with a basic assumption of unequal access to power, emerging feminist theory acknowledges differences based not only on gender, but also on age, ethnicity, socioeconomic status, and culture (Connelly, Li, MacDonald and Parpart, 2000; Cornwall, 2003; Harcourt, 1994; Rocheleau et al., 1996). This departure from androcentric and ethnocentric theories accommodates more possible explanations for the persistence and expansion of participation as a factor in development.²

One existing framework for examining and presenting gender implications within political ecology has been adapted for the purpose of this study. The Managing Ecosystems and Resources with Gender Emphasis (MERGE) framework takes a gendered political ecology approach (Rocheleau et al., 1996) to identify factors that influence natural resource use and interactions between them (Schmink, 1999). In keeping with principles of political ecology, the framework supports exploration of interactions between socioeconomic, political, and ecological factors affecting natural resource use, while adding to the equation gender differentiated relations to these resources.

The MERGE framework is presented as a practical way of organizing and exploring both the contextual and procedural aspects of conservation project planning and delivery. The multiple scales accounted for by this framework allow researchers to

² Androcentrism is “A term developed by feminist theorists to describe the dominant worldview that, until recently, mostly excluded the experiences of women from its analysis. This term also refers to an approach taken to knowledge and the production of knowledge.” Ethnocentric refers to “Believing that one’s race, nation, or culture is superior to all others” (Parpart, et al., 2000, Appendix 1, Key Concepts).

incorporate levels of activity and decision-making frequently excluded from project planning frameworks. By combining political ecology, and macro and micro-level stakeholder analysis, as well as gender analysis, this framework includes the range of factors that confront successful design and delivery of development projects. The MERGE framework was developed to examine inputs and outputs of community-based conservation efforts. Although designed for use in conservation projects, the framework proves flexible enough to be applied to development projects.

The second part of the theoretical framework for this study concerns the rationale behind incorporating farmer participation in development projects. According to Norman, farmer-centered approaches to agricultural development began in the 1970s as a response to the failure of conventional development efforts to reach those facing severe economic and environmental constraints (1980). As a result, agricultural research and development became more site-specific in terms of resource availability (Collinson, 2000; Feldstein and Poats, 1989; Hildebrand, 1986; Norman, 1980). This specificity—or tailoring—depended on farmer input, which took them from recipients of technologies to participants in the process (Feldstein and Poats, 1989). Chapter 2 highlights recent synthesis and justification for farmer-centered development.

Concepts and ideas from political ecology and participation in development guided the development of this study. Given the range of factors affecting the study, a gendered political ecology framework emerged as a logical approach to organizing, analyzing, and presenting the data available. Gendered political ecology and participation in development are discussed in Chapter 2.

Research Setting

St. Lucia and Dominica, like many developing nations, suffer the consequences of market liberalization and globalization associated with structural adjustment in the 1980s and 90s. The rules are now made by The International Monetary Fund (IMF), World Bank, World Trade Organization (WTO), European Union, and United States, among others. As a result, developing countries are susceptible to the influence of outsiders in matters such as local government structures and policy initiatives. While not mandatory, their participation in the global economy is tied to continued development assistance on which they rely.

Due to historical factors (presented in Chapter 4), St. Lucia and Dominica were particularly susceptible to the rising tide of globalization and its related goal of market liberalization. Both countries relied heavily on monocrop export agriculture—bananas—for employment and export earnings. A 1992 WTO ruling against a long-standing protected market system between Britain and several of its former colonies, including St. Lucia and Dominica, initiated the ‘banana wars.’ This trade dispute (expanded in Chapter 4) had significant influence on rural livelihoods in these two countries and their economies in general. Historical factors leading up to the ruling, the ruling itself, and resulting changes have created serious economic hardships that exemplify the position of St. Lucia and Dominica relative to other countries, transnational corporations, and governing bodies.

The WTO ruling against the favorable market arrangement between Britain and its former colonies threatened livelihood security of farmers and their families in St. Lucia and Dominica. As a result of WTO forced market liberalization, St. Lucia and

Dominica needed development aid to combat rising unemployment, out migration, and economic recession brought on by declining banana revenue. Currently, as these farmers struggle to make ends meet, their governments and international development agencies have little choice but to step in and help them find ways to survive. As Dujon suggested, “the economy stands in transition to a crisis” (1997, p. 1538).

The Intervention

As the banana wars raged in foreign courtrooms in the mid-1990s, farm households in Eastern Caribbean countries like St. Lucia and Dominica lost a main source of their livelihoods (Bryan, 1997; Lewis, 2000; Sutton, 1997). The price per pound of bananas declined to the point where many producers were losing money but continued to produce bananas to cover household expenses. ✓

Farmers needed assistance, and some was provided by FAO in the form of short-term projects designed to strengthen delivery of agricultural extension to farmers. The projects, “Strengthening Extension Delivery Services,” sought to help ministries of agriculture and farmers collaborate more productively by introducing participatory methods and approaches. The rationale for the projects suggested that national agricultural ministries could serve their clientele (primarily farmers) better by increasing their understanding of farmers’ realities (FAO, 1999b, 2001).

The FAO projects sought to re-orient national policy—making bodies (Ministries of Agriculture) and their outreach arms (Extension divisions) from traditional top-down approaches to supplying agricultural technologies to a more client-centered, needs-based approach (FAO, 1999b, 2001). In this new approach, front-line staff would dialogue with farmers, gain an understanding of the conditions they faced, and work

with them to develop appropriate strategies for addressing existing challenges—namely limited opportunities for agricultural livelihood activities. There were many intended outcomes of the projects, including strategies for each ministry, extension division, front-line officers, and farmers to address existing situations (FAO, 2000, 2002).

Each FAO project was 18 months in duration and involved a series of component projects designed to address issues ranging from computer training to agricultural record—keeping and farmer group formation and function (see Appendix B for examples). Each component of the 18-month long projects was targeted toward building capacity of extension personnel whose role was to incorporate these new skills into their work with farmers. The focus of this study is the initial component of the FAO projects in St. Lucia and Dominica, referred to as Participatory Rural Appraisals (PRAs) or “the project(s).” The PRAs were designed to provide baseline data for many of the subsequent project components.

FAO made farmer participation in the projects a priority and suggested that extension delivery, and therefore agricultural sector performance, could be improved by giving greater weight to farmers’ perspectives than had been done in the past. FAO’s interest in hearing farmers’ voices included those not typically reached by extension. As such, efforts were made to include a diverse audience of farmers across ranges of socioeconomic status, agro-ecological zones, scales of production, age, ethnicity, and gender.

Statement of the Problem

While designed to address local conditions, participatory agricultural development efforts must acknowledge the interrelatedness of actors with each other

and their larger environments. Endogenous and exogenous factors not only set the stage by contributing to the situation, they also influence possible solutions. Although participatory agricultural development has become ‘right and good,’ focus on intended beneficiaries—in isolation—may fail to address (1) the heterogeneity of these stakeholders; (2) their engagement, or lack thereof, with other stakeholders in the process; and (3) connections between stakeholders and their greater gendered political ecology.

The participatory agricultural development projects that are the focus of this study were designed to increase livelihood security of farmers in St. Lucia and Dominica by incorporating their participation into extension program development and delivery. This approach suggested that livelihood insecurity could be addressed by changing relationships between farmers and extension, and that together, these two groups of stakeholders had the power to address the situation.

Research Questions

Concepts and theories from gendered political ecology as presented in the MERGE framework, and participation in development guided the development of the research questions stated in this study. Based on these concepts, gendered political ecology provides a framework for the confluence of factors that created the present situation while participation refers to the process—the series of activities or roles—undertaken by stakeholders.

This study addresses the following research questions:

1. How did the confluence of political, economic, social, and ecological factors in St. Lucia and Dominica contribute to the need for intervention?

2. Who were the stakeholders in each project and how did they participate in the different phases of each project (project preparation and planning, training, fieldwork, synthesis, analysis, and reporting of results)?
3. How did interactions within and between several stakeholder groups affect outcomes of each of the participatory development projects in this study?

Objectives of this study are as follows:

- 1: Conduct a gendered political ecology analysis of St. Lucia and Dominica. Identify major themes and associate their historical emergence with the current situation.
- 2: Identify key stakeholders in each of the study projects including their stake and expectations of the projects.
- 3: Identify and document decision-making processes undertaken in preparing, implementing, and reporting on each phase of the two study projects. Indicate how stakeholders did or did not participate in decision-making, including who participated, how, when, and who facilitated their participation.
- 4: Determine what led to conflict and/or collaboration in each project, how it was managed, and how that impacted outcomes.

Summary

A detailed accounting of relationships among participation, power, and gendered political ecology contribute to understanding decision-making, consensus building, and meeting expectations in participatory development projects. It builds on existing political ecology and development theory, and sheds light on the importance of designing and following a process in addition to using appropriate tools. This study bridges a gap in the literature by examining processes involved in designing, developing, and implementing participatory development projects within a political ecology framework.

This dissertation is structured as follows: Chapter 2 provides a review of the literature on two main themes: (1) gendered political ecology as an appropriate theoretical framework for this study and (2) participation in development. Chapter 3

presents the qualitative methodology, informed by feminist theory, used to design and conduct this study. Chapter 4 presents the two study sites within the historical and ecological perspectives using gendered political ecology as suggested by the MERGE framework. In addition to setting the stage for the study, Chapter 4 provides the first step in analysis of factors affecting the projects. Chapter 5 presents project-specific data analysis, following the MERGE framework beginning with local-level stakeholder analysis and continuing with project analysis and gendered resource use in St. Lucia and Dominica. Chapter 6 presents findings, and Chapter 7 presents conclusions and recommendations of the study.

CHAPTER 2 LITERATURE REVIEW

This chapter reviews literature related to gendered political ecology and participation in development, that together frame this study. An introduction is followed by, (1) an overview of streams of thought contributing to political ecology; (2) gendered political ecology and the MERGE framework (Schmink, 1999); and (3) background on the emergence, evolution, and current issues pertaining to participation in development. The section on participation concludes with a review of agricultural extension as a vehicle for fostering farmer participation, and Participatory Rural Appraisals as a methodology for doing so.

While the focus of this study is on decision-making within two development projects, it is important to recognize that real people made these decisions, and did so within a matrix of forces that affected their decision-making. Exploring gendered political ecology and participation facilitates recognition and analysis of these forces from the local to the global level.

This dissertation does not simply explain current natural resource use patterns or the political ecology in St. Lucia and Dominica. It focuses on how the combination of factors that is political ecology shapes people's participation in development projects designed to improve their natural resource-based livelihoods. The political ecology of the setting ties together a history of the agricultural sector and the political and economic goals of global, regional, and local influences. For the purpose of this study,

‘agricultural sector behavior’ includes national, regional, and local goals and objectives to indicate how farmers survived in the face of changing policy, markets, and economies.

This framework will be used to explain the historical development of natural resource use in St. Lucia and Dominica, and how global, regional, and local concerns have contributed to the conditions that currently exist. These conditions spawned the study projects, helping to define their purpose and the sponsoring agency’s expected outcomes.

Political Ecology

With roots in physical science, social science, and political economy, political ecology accepts that social, economic, and political forces influence how, when, and why humans interact with their environments (Bryant, 1992; Greenberg and Park, 1994). Political ecology integrates political economy and human ecology principles in its approach to understanding the interconnectedness between social, economic, and political processes that influence natural resource use (Greenberg and Park, 1994; Escobar, 1998; Schmink and Wood, 1987; Stonich, 1993). This perspective is important to this study as it allows for examination of projects designed to improve natural resource based livelihoods without *ex-ante* determination of which forces are dominant.

Ecology

The first field of influence in political ecology comes from ecology. The roots of ecology can be traced back to the 1860s, when Haeckel defined it as, “the science of the relations of living organisms to the external world” (Greenberg and Park, 1994, p.

2). Early ecologists included Humboldt, who traveled widely studying plant geography and Charles Darwin whose *Origins of Species* informed future research on evolution and species diversity.

Two major schools of thought developed within ecology: evolutionists—who emphasized evolution at the individual level; and ecosystem advocates—who focused on interactions within and between communities of organisms. Evolutionists grounded themselves in individual level competition as the driving force of change, believing that communities were just groups of competing individuals, while ecosystems specialists encouraged a more holistic conceptualization of action/interaction among and between organisms. Whether considered in isolation or from a more holistic perspective, ecologists emphasize the evolution of organisms at the individual or community level (Greenberg and Park, 1994; Holdgate, 1994). Both of these perspectives focus exclusively on the ‘natural’ world to the exclusion of the influence that humankind and politics have on organisms.

Social Sciences

The second field of influence in political ecology comes from the social sciences. Social sciences shifted the focus of the human/environment interaction to consider people’s interactions within ecological and environmental settings. According to Greenberg and Park, “ecological ideas have had to be extended in line with social science understandings of the mutual interactions between human society, human productive activity, and the (now only slightly “natural”) environment” (1994, p. 4). Beginning in the 1950s, human and cultural ecologists within anthropology sought a clearer understanding of relationships between human populations and their natural

environment. Among their interests was the relationship between existing ecological systems and changing cultural practices, or cultural practices and changing ecologies. However, establishing causality for such change proved difficult, and “although micro-approaches had considerable success with small, rural populations, the application of the simple ecological models to human societies soon seemed problematic” (Greenberg and Park, 1994:4). The failure of social sciences to diagnose issues of social and technological changes over time raised issues of scale, boundaries, space, and institutional influences on cultural evolution, leaving room for additional factors.

Political Economy

The third stream contributing to political ecology is that of political economy. Political economy framed the question of people’s relationship to the greater world (social and environmental) as one primarily driven by their location vis-à-vis political institutions and markets. Deriving theory from political science and economics, political economists couched the evolution of populations in terms of their relationships to broader institutions and markets. Political economy encouraged examination of integration between local populations and the larger political economies in which they were embedded (Wolf, 1982).

Rostow (1960) suggested that societies go through prescribed stages of economic development on their way to ‘modernization,’ and political economy came to the forefront with this theory. Modernization theorists expected nations to progress from traditional to modern via their contact with global capitalism. They equated ‘traditional’ with labor intensive, exchange types of production systems and ‘modern’ with capitalist economies.

Modernization theory was challenged by dependency theory, that suggested that traditional societies are thus as a result of their dependence on capitalist societies, rather than their lack of contact with them. Frank suggested that economic stratification existed and persisted based on an extractive relationship by the metropolis of the satellite (1966). Metropolis represented not only developed nations' domination over underdeveloped, but urban-rural relations within nations as well. The metropolis—a functioning capitalist economy—extracted surplus value from and profited at the expense of the satellite or traditional economy.

The emergence of world systems theory in the mid 1970s introduced a worldwide market that had expanded to cover the globe in the last 500 years. Wallerstein defined states as core, semi-periphery, or periphery based on their ability to extract value from labor, and claimed that the persistence of this system has led to structural differences between the different types of states (1974). This version of political ecology accounts for core states economic and political domination of peripheral states, and peripheral states functioning to meet the requirements of the core.

Political ecology is useful for understanding and addressing human/environmental interactions at local, regional, and global scales by examining them in concert with political-economic forces (Grossman, 1993; Holdgate, 1994). The resulting approach “aims at developing a new paradigm of production that incorporates, for any given ecosystem and social group, cultural, ecological, and technoeconomic factors into a strategy that is ecologically and culturally sustainable” (Escobar, 1998, p. 62). The focus that political ecology gives to external forces and local community adaptation to their influences provides an adequate framework for those who work with

rural communities continually subjected to the will of global political and market forces (McIlvaine-Newsad, 2000).

Gendered Political Ecology & MERGE

As comprehensive as political ecology appears, in its conceptualization and early practice it did not explicitly recognize women's roles, needs, and perspectives in relation to natural resources, or acknowledge socially constructed differences between resource use by women and men.¹ The importance of women's roles in development was brought into the discourse as Women in Development (WID) in the 1970s, followed by Women and Development (WAD), and by Gender and Development from the 1980s onward.

WID was predicated on the idea that both women and men must be lifted from poverty, and that both women and men must therefore be recognized and included in development. Closely associated with modernization theory, the WID approach focused on improving women's welfare by incorporating them within existing development projects. WID advocates recognized that women simply were not counted and began addressing the need for statistical representation of women's lives, roles, and contributions where little had existed. Once women appeared, WID pushed to include them in education, training, employment, and credit opportunities by claiming that these opportunities would increase women's economic efficiency (Moser, 1993;

- Reddock, 2000). Having gotten on the development agenda by focusing on women's

¹ Esther Boserup is credited with putting women on the agricultural development map by publicizing a sexual division of labor that dictated their roles as food producers in Africa, Asia, the Caribbean and Latin America, and by classifying agricultural production systems by who held major responsibility for major production activities. Her research illustrated that most development efforts of the period ignored women, offered training and resources to men, and often undermined women's positions within the household (Boserup, 1970).

productive capacity, WID was unable to untangle or address the causes of their subordination. WID increased women's visibility as productive members of households, communities and countries but did not seek to address the root causes of women's disadvantaged position vis-à-vis access to and control of resources. ✓

The shift from modernization theory to dependency theory as the dominant development paradigm in the 1960s corresponded with a shift from WID to Women and Development (WAD). ✓ Rather than being seen as the solution to underdevelopment, the West was seen as the cause, and rather than adding women to projects designed for men, women needed attention in their own right. As reflected in the names, these approaches differed in their perception of women's relationship to development. In moving from women *in* development to women *and* development, this approach elevated women from a bit player within the process to the focus of the process.

Gender and Development (GAD) emerged during the 1980s and seemed to ✓ reframe the question from what do women need, to what are the root causes of their needs? This approach is predicated on the belief that women's position in society is socially constructed rather than the natural order of things. GAD, with attention to social constructs that determined women's space in relation to men's changed the focus from treating the symptoms to exploring the causes by "addressing women's and men's social roles in relation to development" (Smyth, 1999, p. 9).

GAD quickly moved from a theoretical framework to a series of analytical frameworks used today. In addition to women's material condition and class position, ✓ GAD explores and analyzes patriarchal ideas and structures that reinforce women's

disadvantaged position. Molyneux (1985) introduced the concept of women's interests ✓
as either practical or strategic, and Moser (1993) adapted these terms for planning to
meet women's needs.

— **Practical gender interests/needs:** If these needs were met, the lives of women (or men) would be improved without changing the existing gender division of labour or challenging women's subordinate position in society. Meeting practical interests/needs is a response to an immediate perceived necessity; interventions which do this are typically concerned with inadequacies in living conditions such as water provision, health care and employment.

— **Strategic gender interests/needs:** If these were met, the existing relationship of unequal power between men and women would be transformed. These interests/needs relate to gender division of labour, power, and control. Those identified by women may include issues such as legal rights, domestic violence, equal wages, and women's control over their bodies (Smyth, 1999, p. 20).

Having evolved from the early imperative to count women, gender analysis helped researchers and practitioners recognize women's roles as decision makers in cultivating, collecting, and care giving while acknowledging social and structural barriers to women's empowerment. However flexible this approach appeared, its primary use was within the agricultural sector where much development was focused. That is not to suggest that researchers focused solely on women's production activities; to the contrary, women's triple roles—production, reproduction and community ✓
management activities—were recognized and accounted for with corresponding analytical frameworks (Moser, 1993).²

While women's association with natural resources was embedded in gender and development thought and practice, less attention was given to women's relationship ✓
with their broader ecological environments. Whereas women's roles in agriculture

² See March, Smyth and Mukhopadhyay, 1999 for a comprehensive guide to gender analysis frameworks.

became clearer to the development world in the 1970s and 1980s, their roles as managers of ecosystems lagged behind until into the 1990s. Closer examination suggested that,

There is also a gender dimension to ecological inequality . . . Women's role in provisioning and care of the household leads to a special concern with such issues as scarcity and pollution of water and lack of firewood. Women often have a smaller share of private property and depend more heavily on common property resources. Also, women often have specific traditional knowledge in agriculture and medicine, which is devalued by intrusion of market resource exploitation or state control. (Martinez-Alier, 1998, p. 23)

Feminism, Gender, and Political Ecology

The following discussion of feminism and gender is not meant as a comprehensive or comparative review of the subjects. Rather, it is meant to illuminate linkages between them, and how together they contribute to a political ecology that explicitly includes women. Feminist thought has remained behind-the-scenes in the wider discourse on gender and development. Gender, a less charged term, has been used to indicate a female-centered perspective even when couched in a social construct that analyzes women's position relative to men. Somewhat conspicuous by its absence in development practice, feminist theory has informed and impacted much of the work done within gender and development. While gender claims that women's reality in a given situation is largely determined by local expectations, norms, laws, etc, rather than dictated by biology, the de facto focus of gender research is inequality between men and women. Recognition of this inequality is but a short step from the core of feminist theory—the subordination of women.

A notable contribution of feminist thought to development has been feminist critique of science with a call to question and challenge dominant paradigms, models,

and approaches (Harcourt, 1994; Harding, 1987; Hartman and Messer-Davidow, 1991; Naples, 2003; Rocheleau, et al., 1996; Rosser, 2000). Feminist theorists claim that objective, positivist science is not value free, promotes a particular agenda, and is by nature disadvantageous to women.³ It must be noted that feminist critiques of science and dominant development paradigms are based not only on sex, but find their center in questions of power. While gender and development acknowledged power as 'access to and control of' resources, questions of power at other levels and in other spheres remained the domain of feminist theorists. Their concern raised the debate about women's situations from forests and fields to questioning what is legitimate knowledge, who produces it and who can claim it.

This researcher suggests in this way, feminism is an inherently political orientation with gender as its application in the real world of development practice. Feminist political ecology serves as both a methodology and a political stance (Harcourt, 1994), while gendered political ecology suggests methods for recognizing and incorporating women's roles, responsibilities and realities in natural resource use.

Women emerged in political ecology during the 1990s, both explicitly (Rocheleau, et. al, 1996; Schmink, 1999), and implicitly (Agarwal, 1994; Agarwal, 1997; Harcourt, 1994). Like other political ecologists, Rocheleau et. al, (1996) examined environmental practices and policies as a series of decision making processes within particular social, political, and economic contexts, acknowledging uneven access to, control, and distribution of natural resources. However, they claim a distinctly

³ Regardless of the type of feminism, feminists promote challenging dominant paradigms wherever they exist. For a comprehensive review of feminisms and their critiques of science, see Rosser, 2000.

feminist perspective on political ecology by treating “gender as a critical variable in shaping resource access and control, interacting with class, caste, race, culture, and ethnicity to shape processes of ecological change” (1996, p. 4). They justify their approach as feminist on two fronts: by examining the constructed definition of environment through the lens of feminist critique of science; and the emergence of feminist environmental activism.

Another critical association of women with political ecology is Schmink’s MERGE conceptual framework (1999). I argue that while not explicitly feminist, this framework relies heavily on feminist methods of self-reflection, positionality and women and their lived experiences as valid sources of knowing. Emerging from applied research and community based conservation experiences, the MERGE project sought to “address the need to strengthen the understanding of gender issues in natural resource management for both academic researchers and local technicians responsible for the implementation of natural resource management projects” (Schmink, 1999).⁴ In keeping with political ecology, MERGE accounts for historical, ecological, cultural, socioeconomic and political factors affecting natural resource use. In addition, the MERGE framework puts a premium on local actors, their patterns of use, and their perceptions. Recognizing and acknowledging local actors’ roles in creating and maintaining sustainable natural resource use strategies ties together participation and political ecology. Inherent in this conceptual framework is the recognition that empowering local actors in isolation from those intervening factors, inadequately

⁴ For an account of the evolution of the MERGE project with the Tropical Conservation and Development Program at the University of Florida, and MERGE conceptual framework, see <http://www.latam.ufl.edu/merge/mergeintro.html>.

addresses issues of power and competing interests. Only by mapping out influential factors, in relation to each other, can researchers, practitioners, and community members accurately assess and address the situation.

1. How is the potential for community-based conservation projects constrained or enhanced by historical, ecological, cultural, socioeconomic and political factors at diverse scales?
[Political Ecology analysis]
2. Who are the multiple stakeholder groups involved in direct or indirect negotiation for resources? In what ways are their interests complementary and/or in conflict? How do their different levels of power and resources affect the outcomes of negotiations?
[Stakeholder analysis]
3. Under what conditions does participation by local communities contribute to goals of achieving conservation with improved livelihoods?
[Stakeholder analysis within the community]
4. In what ways do gender relations differentiate people's connections with natural resources and ecological systems, including knowledge of, use of, access to, control of, and impact on natural resources, and attitudes towards resources and conservation?
[Gender relations and resource analysis]
5. Does stakeholder participation in participatory learning with a gender focus improve the ability of local groups to negotiate their interests in conservation? [Project analysis]
6. How are changes in resource use and management by local communities linked to biodiversity and conservation?
[Sustainability analysis]
7. How can stakeholder learning contribute to conservation success in the long run? How can it be incorporated into a broader strategy for institutional change and partnership that provides continuity in research, exchange, technical assistance and other participatory activities with local communities?
[Institutional analysis]

Figure 2-1. MERGE Conceptual Framework. Source: Schmink, 1999.

In its original form, the MERGE framework was directed toward community based conservation efforts.⁵ The progressions from political ecology analysis through local stakeholder and institutional analysis “provide a systematic understanding of the interplay of socio-environmental factors that lead to the observed patterns of resource use,” and can result in location and situation specific policy interventions (Schmink,

⁵ For the purpose of this study, I have adapted the MERGE conceptual framework to be applicable to the projects that are the subject of this research. The adapted version is presented in the Chapter 3.

1999). In that context, it is grounded in community level participation as a key to equitable and sustainable development with “emphasis on understanding the opportunities and constraints, the incentives and disincentives that influence the decisions that are made by individual actors and groups” (Schmink, 1999).

Participation in Development

Development assumes some basic equality between developed and underdeveloped nations within the present world. That assumption has been questioned since at least the 1950s, and continues to be challenged with increasing sophistication. Peripheral societies differ from the industrialized West in terms of their internal structures, their integration within the world economy, and their immediate historical and cultural heritage. (Trouillot, 1988, p. 286)

This review of participation in development is meant to acquaint the reader with the progression from expert centered, information-based efforts to the current focus on client-centered empowerment. This review has not treated participation within specific fields, for example health, education, or conservation, but presents an account of the change of mentality within development over the last fifty years. As implied, a certain amount of uncertainty accompanies discussions and defenses of participation.

Since its arrival in the 1970s, participation has emerged as a dominant paradigm in international development (White, 2000). Funding proposals must often prove to donors that their project considers all stakeholders (Deshler and Sock, 1985; Dichter, 1989). Policy makers want to know what ‘the people’ think. Governments in the “North” and development agencies are promoting decentralization and democratization.

As participation spread and the number of practitioners increased, so did the need for understanding effective tools, techniques and methods. Information was passed on through networks of practitioners and participation became its own innovation process (Collinson, 2000). As participation took hold, there arose a need to standardize

processes and approaches. This had advantages and disadvantages. The advantage was that the idea was reaching an ever-growing audience. The disadvantage was that in some cases it was being standardized and diluted (Chambers, 1998; Guijt and Shah, 1998; Pritchett and Woolcock, 2004).

Standardization of tools for participation led to criticisms of the approach. It had lost its flexibility and dynamism. Rather than being responsive and context-specific, participation became a necessity in any 'good' project. These criticisms caused practitioners and researchers to clarify meanings of participation. This clarification came mainly in the form of typologies of participation. Currently several typologies of participation are recognized, and are typically presented as a scale or continuum by which to gauge the nature of participation of the intended recipients in development projects (Waisbord, 2002; White, 2000). These typologies suggest that not all participation is created equal (Deshler and Sock, 1985; Lilja and Ashby, 1999; Pretty, 1995; White, 2000). Connections have been established between approaches (typologies) to participation and expected outcomes; however they come complete with the assumption that success is as simple as picking the correct approach to incorporating participation (Guijt and Shah, 1998; van Veldhuizen, Waters-Bayer, and Zeeuw, 1997).

History of Participation in Development

That participation has become part of the development agenda at all is no mean feat and its current emphasis signals a grand paradigmatic shift in the last five decades. Although observers might suspect that participation is a recent innovation in development practice, it is more accurate to say that there have always been those who

approached this work with the belief that answers lie within individuals, households, and communities, rather than within donor organizations and policy making bodies (Freire, 1970; St. Anne, 1999).

Political science and economics dominated 20th century development theory after World War II. The primary goals were to transform institutions and markets in the developing world into versions that more closely resembled those of the developed world (Hancock, 1989; Pritchett and Woolcock, 2004; Rostow, 1960). Development was seen as the duty to close the gap between the haves and the have-nots by giving the latter group a road map to prosperity, based largely on the paths followed by the former (Rogers, 1995, Rostow, 1960). The underlying assumption(s) was that conditions in the developing world could, and should be improved by focusing on political systems, markets, and education (Tomich, Kilby, and Johnston, 1995). As Pritchett and Woodcock claim, economists “focused their tools on the question of what governments should do, with relatively less attention to the economics and politics of how to accomplish the ‘what’” (2004, p. 192).

According to Waisbord (2002) who examined the role of development communication, the last 50 years of practice and discourse were dominated by two basic assumptions about the causality of underdevelopment, (1) lack of appropriate information (such as technologies); and (2) unequal power among populations. The first of these assumptions reflects modernization theorists’ belief that adequate information (and education) could change the behavior of populations and carry them toward development (Rostow, 1960). The second assumption was more in line with

dependency theorists who believed that the underdevelopment of some was a result of development of others (Frank, 1966).

Proponents of modernization theory addressed complicated issues by attempting to change behavior by providing adequate information. In their view, appropriate information would lead to behavioral change, putting populations on the right track toward modernization. It was suggested that underdeveloped nations suffered bottlenecks at certain points on the path due to their traditional cultural beliefs, and that these kept them from moving up the ladder of consumption. These bottlenecks were to be addressed by providing new ideas—to overcome the old—that would lead to desired behavior, progress, and ultimately development. This approach to development was based on the belief that individual, group, or societal behavior was the problem (cause of underdevelopment) and could be solved by introducing better ways of behaving (Rostow, 1960, Waisbord, 2002).

Modernization theory manifests itself in efforts to diffuse information, technologies, ideas, or practices with little or no attention to the heterogeneity of the intended audience and their realities: political, economic, environmental, ecological, social, or religious. Nor was it deemed necessary to engage recipients in meaningful dialogue when one-way communication seemed sufficient to deliver the message. It was thought that these non-technical factors should not impact an audience's ability to adopt new or improved technologies. In other words, neither these, nor other exogenous factors, were expected to affect people's capacity to change (Rogers, 1995). Governments sought to skip the steps involved in slowly establishing and maintaining governance structures necessary for meeting their citizens' needs. Instead, they

mimicked the organizational forms of existing, ‘developed’ nations, and made their own situations worse (Pritchett and Woolcock, 2004). This shortcoming traditional approaches—which dominated development from the 1950s into the 1980s—opened the door for examination of the reasons behind the failures, and an examination of underlying assumptions made by decision-makers. One of the most costly assumptions was that of a need that could be met with a technical solution, delivered by an impersonal, rules-driven provider (Pritchett and Woolcock, 2004).

Modernization theory was eventually challenged by dependency theory, which supported the second of the major assumptions presented by Waisbord: that unequal power relations were responsible for underdevelopment. Rather than putting sole blame for their plight on underdeveloped nations, dependency theory suggested that external factors were responsible, at least in part, for the disparity between the haves and the have-nots. Underdevelopment was due to a combination of factors including faulty social processes and the practice of powerful nations extracting assets from the weaker, peripheral states and so on down the line (Wallerstein, 1974).

As this theory gained momentum, the focus shifted to interconnectedness, power differentials, and competing interests. Underdevelopment could no longer be blamed on lack of information, but rather on social and political factors. It followed then that better information leading to individual behavioral change was not the solution. The answers lay in political and social change. Dependency theory shifted the burden from individual behavior to the function of institutions and power differentials. Nonetheless, development during this era still followed the “*need* as the problem, *supply* as the

solution, *civil service* as the instrument” model for institutions and organizations (Pritchett and Woolcock, 2004, p. 192).

Although casting underdevelopment in a different light, dependency theory failed to change significantly the way development—as planned change—was managed by practitioners, researchers, or policy makers. Answers, and solutions were still derived and implemented by outsiders rather than those most affected by the situation. Little attention was paid to the individuals on whose backs and by whose labor development was to happen. Women and men, young and old, Muslim and Christian, relatively wealthy and relatively poor people were all treated the same by policy makers, researchers, planners, and practitioners. It was as if there was an *average rural resident* in a developing country, and everyone else knew what was best for her or him.

According to Karl (2000), long-term failure of conventional development efforts, as evidenced by increasing poverty, caused a paradigmatic shift away from modernization and dependency theory. The emphasis on information and institutions had failed to create substantive or sustainable change in the well being of the poorest of the poor. Upon reflection by examiners of development history, it became clear that for several decades, projects and programs had been planned *for* and delivered *to* people, rather than *with* them.

Alternatives to the dominant, top-down approaches to development did exist. In fact, as early as the mid 1970's, groups of researchers and practitioners working across the globe established contact with each other and compared notes on emerging approaches to development (Chambers, 1997). With more differences than similarities between the various pockets of activity, some common themes emerged, (1) a client-

centered approach whereby individuals were consulted and their input helped shape subsequent research agendas; (2) an increased reliance on social scientists and social science rather than just biophysical scientists and science; and (3) a systems, or holistic approach to examination and analysis. Focus shifted to interactions between households, their members, their activities, resources, requirements, and constraints in concert with plants, water, soil, or animals.

Early practitioners and advocates of participation in development were field staff who experimented with new ways of communicating with farmers, making research more germane to their individual needs. The idea and practice of involving farmers—allowing them to participate—gained a following as it became clear that not all farmers were benefiting from the traditional, ‘top-down’ agricultural development model, and that not all farmers were the same (Chambers, 1997; Collinson, 2000; Escobar, 2000; Hildebrand, 1986; Whyte, 1981).

Participation grew into something ‘good and right,’ almost regardless of its form or function (Cleaver, 1999; Guijt and Shah, 1998). Participation included political scientists promoting democratization; economists seeking ways to integrate people into markets; sociologists focusing on community action; and others seeking richer data that emerged from engaging stakeholders (White, 2000). With no single rationale, participation played many roles and served many purposes. Much like gender sensitive and eco-friendly approaches to development, participation was credited with everything from increasing efficiency of projects to empowering the traditionally powerless. And much like gender analysis and ‘green’ approaches, participation is open to

interpretation by those responsible for its institutionalization, explanation, and implementation (White, 2000).

Participation is now promoted as a key to ensuring appropriate technology development, dissemination, and sustainability (Chambers, 1997; Guijt and Shah, 1998; Karl, 2000). Current views suggest that rural populations with limited resources in the developing world, especially women, must have a greater voice in setting development agendas that influence their livelihood systems and dictate their survival strategies (Harcourt, 1994; Rocheleau, et. al, 1996; Reddock, 2000; Saito and Spurling, 1992). The evolution of development theory from information centered, modernization approaches toward power centered, participatory approaches has provided new lenses through which to view the idea of planned change in the developing world.

As a result, *participation*, became part of mainstream development strategies for addressing the failures of the past. According to Karl, “Development agencies began to introduce concepts of participation in projects and programmes in the late 1970s and early 1980s after lack of beneficiary participation was identified as a reason for the failure of many development efforts” (2000, p. 85)

Guijt and Shah (1998) agree that although not a new idea, participation emerged on the global stage of development as early as the 1970s. Its major proponents were field workers and practitioners who recognized the value of the existing knowledge of farmers and sought to formalize it. This system of trial and error seemed in direct response to decades of top-down directives from researchers and policy makers with

little understanding of the reality on the ground.⁶ Early experiences with participation led to research that was more tailored to specific audiences and their needs.

The 1980s saw an expansion of the use of participatory approaches, and corresponding confusion over terminology, methods, and practice. Those promoting participation based their approaches on respecting local knowledge and experimenting with people, rather than for them. As more work was done with individuals and communities, greater emphasis was placed on increasing their capacity to solve their own problems.

From the early 1990s, participation has been a dominant paradigm in development (Guijt and Shah, 1998; Peters, 1996; Webber and Ison, 1995; White, 2000). The evidence is the emphasis put on 'participation' by donors as a condition for funding projects and programs. Participation came to be characterized as an appropriate approach as well as a means of ensuring sustainability of projects and programs (Cleaver, 1999). Policy makers and practitioners sensed that participation was a positive innovation and the word spread. Practitioners wrote about their experiences, sharing them with others in an effort to multiply positive outcomes (for examples see: Ascroft, and Masilela, 1994; Guijt and Shah, 1998; Swantz, 1994; Wacker, 1994).

High expectations of participation are reflected in vague definitions and laundry lists of likely outcomes cited by practitioners, researchers, development agencies and policy makers (Karl, 2000; Guijt and Shah, 1998; Jacobson, 1994; White, 1994).

⁶ Much of the theoretical foundation of people helping themselves while learning from each other as a process is attributable to Paulo Freire's Pedagogy of the Oppressed (1970).

Participation is more likely to be explained by what it can do, than by what it is or cannot do. This is not to say that participation cannot meet these objectives, rather that without clear definitions and expectations, participation might just as easily miss as hit its targets. It is interesting to note lack of delineation between definitions, rationale, expectations, or techniques for implementing participation (Karl, 2000). Given a lack of precise definitions of participation, skeptics such as Cleaver (1999) and Dichter (1989) question the validity and utility of participation in development.

There is a wide range of interpretations that can be reduced to a few common themes. It is difficult to discern *one definition* of participation. Interpretation suggests that lack of a common definition reflects the complex nature of the term and its practice. In the end, participation is context specific, and could look different from one situation to the next depending on factors such as those identified within gendered political ecology. According to Jan Servaes, writing in the field of development communication,

Participation is a term used to refer to a number of social and planning processes occurring in many different places and in many different contexts. To some, participation is a means to reach a certain goal; to others, participation is an end in itself. (1996, p. 15)

Bordenave suggests, "In order to avoid banalization of the term, participation should be referred to as the *joint efforts of people for achieving a common, important objective previously defined by them*" (1994, p. 46).

Whereas concise definitions of participation are limited, there are many justification and expectations. The underlying assumption suggests that stakeholder inclusion leads to more accurate situational analysis, more sustainable results, and more effective investment of resources. There seems to be no single rationale for

incorporating participation in development efforts, but justification is based on the belief that increased participation leads to increased effectiveness (Chambers, 1997; Cleaver, 1999; Guijt and Shah, 1998; White, 1994). John Thomas, a political scientist suggests,

The principal reason for involving the public in decision-making is to increase acceptance of the decision, especially when implementation hinges on that acceptance. Involvement increases the likelihood of public acceptance and of successful implementation by nurturing citizen “ownership” of the decision. (1995, p. 48)

In the same vein, White argues genuine participation occurs when “the development bureaucracy, the local elite, and the people are working cooperatively throughout the decision-making process and when the people are empowered to control the action to be taken” (1994, p. 17).

According to Karl, “Some of the common objectives and expected benefits of participation in development are improving the efficiency, effectiveness, sustainability and coverage of projects and programmes and promoting stakeholders capacity, self-reliance and empowerment” (2000, p. 23).

Clayton, Oakley, and Pratt, summarize widespread hypotheses of the benefits of participation in rural development projects and programmes. It is expected that participation can:

- “Increase the efficiency of development activities by involving local resources and skills and thereby make better use of external costs.
- Increase the effectiveness of activities, by ensuring that they are based upon local knowledge and understanding and are more relevant to local needs.
- Build local capacities and develop the ability of local people to manage and negotiate development activities.
- Increase coverage and help expand the range of activities.
- Better target beneficiaries to the poor through the identification of key stakeholders who are most affected by the activities.

- Help ensure the sustainability of activities as the beneficiaries assume ownership.
- Improve the status of women by providing the opportunity for them to play a part in development work” (1998).

As summarized by Karl, more specific objectives of participation include

- “Efficiency: to promote agreement, cooperation and interaction to achieve a smoother flow of project services and minimize overall costs.
- Effectiveness: to help achieve the project objectives through the involvement of beneficiaries in project design and implementation.
- Beneficiary capacity: to build the capacity of beneficiaries to share in and take responsibilities for the tasks of projects.
- Self-reliance: to break the mentality of dependence, to promote self-awareness and confidence of rural people and help them learn how to plan and implement so that they have greater control over their lives.
- Empowerment: to achieve a more equitable sharing of power and a higher level of political awareness and strength for the disadvantaged.
- Sustainability: to help ensure that local people maintain the project’s dynamic.
- Coverage: to increase the numbers of rural people who potentially benefit from development” (Oakley 1991) (2000).

One likely explanation for uncertainty around participation can be attributed to the fact that at its very core, it advocates bringing more stakeholders to the table, and acknowledging their points of view. Although simplistic, this interpretation highlights one of the most sensitive issues surrounding the concept of participation: that of power. Taken to its logical end, participation directly impacts the balance of power within and between all levels of stakeholders in the development industry.

Genuine participation directly addresses power and its distribution in society. Participation involves the more equitable sharing of both political [democratic] and economic power, which often decreases the advantage of certain groups. Structural changes involve the redistribution of power. (Servaes, 1996, p. 16)

Critiques of Participation

Criticisms of participation emerged as the approach gained popularity. These criticisms ranged from maintaining ‘ugly’ fields in the name of on-farm research to a willing suspension of disbelief on the part of practitioners to trust farmers (Whyte,

1981; Dichter, 1989). Current critiques target the inherent uncertainty around participation ranging from terminology and implementation to impact and scale. Researchers question the role of participation in 'good' science as it may compromise reliability and validity of studies (Gladwin, Peterson and Mwale, 2002). In their broad critique of the inadequate treatment of gender in participation, Guijt and Shah (1998) question whether or not participation has evolved into a simplified recipe suitable for broad adaptability. This concern implies that participation was meant to be adapted to the context within which it was utilized. They also suggested that participation had become a popular method of conducting needs assessment or data collection but was rarely applied to analyzing or addressing underlying causes of existing situations, i.e., power relations.

Chambers (1997) often cited perspective on participation claimed that previous development efforts failed to realize local complexity, diversity, dynamism, and unpredictability, and incorporate it into development planning. Although few would disagree with the need to recognize these characteristics, Chambers was vague about strategies to follow up on this recognition. It was as though solutions would present themselves after recognition of the nature of people, systems, and problems. Guijt and Shah expand upon this point by suggesting that participation

... is more than inviting people to partake in a needs assessment or a decision-making process. Offering the marginalized opportunities for consultation, without following this through with analysis about causes of oppression and feasible action to redress the causes, is unlikely to be empowering. (1998, p. 11)

Like gender, participation has been advocated for a range of reasons from a more efficient use of resources, to a means for empowering the less powerful. Like gender, participation as an ideal has been advocated and accepted by development institutions

without consensus on goals, indicators, expectations, or understanding of how best to operationalize it. As such, different organizations, and often individuals with the same organization, may conceptualize and practice participation differently.

Participation has been used to describe target populations providing researchers with data, as well as those same beneficiaries planning for, implementing, monitoring and evaluating their own development efforts (Karl, 2000; Pretty in Veldhuizen et al., 1997). Given the range of possibilities, advocates of participation would be hard pressed to articulate ‘how much’ participation was called for, or what type of participation was best for a particular situation.

Much remains to be understood about participation. Political science offers insight into one of the issues of participation: what makes people get involved. The following passage highlights some of the shortcomings of participation in development.

In thinking about why some people are active while others are not, we find it helpful to invert the usual question and to ask instead why people do not take part in politics. Three answers immediately suggest themselves: because they can’t (resources); because they don’t want to (engagement); or because nobody asked (recruitment). (Verba, Schlozman, and Brady, 1995, p. 15)

White (2000) offers a critique of participation by suggesting that focusing on *who participates and at what level* are not enough. As she explains, “sharing through participation does not necessarily mean sharing in power” (p. 143). Her point resonates in an era where people’s participation may mean showing up at the table to listen or respond to experts’ questions. By acknowledging differential access to power, White has shifted focus from quantity of participation to quality. Referring to types of participation where people are simply consulted, she suggests,

At their best, such measures can only facilitate fuller participation, they cannot deliver it. More critically, framing the problem in these terms ties us to

observing the mechanisms for participation; it gives us no mean of assessing its *content*.” (p. 144)

Typologies of Participation

Early explorations of participation resulted from practitioners’ examination of their own work in search of lessons learned. Practitioners themselves recognized some of the difficulty of operationalizing participation, and tried to provide a roadmap for subsequent efforts (Chambers, 1997). Typologies emerged that sought to clarify some of the issues around the term and practice. Researchers such as Lilja and Ashby (1999), Pretty (1997), and White (1994), identified different types of participation and their associated power, location, communication, inputs, and outputs. They suggested that particular types of participation could lead to particular types of outcomes, and which types of participation were more appropriate for which particular settings.

Based on this work, it is now recognized that there is a continuum of participation and frameworks showing various levels of stakeholder involvement. These frameworks do not always indicate who participates and the roles they play, but suggest where various approaches to participation fall relative to each other, and possible outcomes.

Guijt and Shah suggest a useful distinction between participation as a means versus participation as an end in and of itself. While not prescriptive, this basic categorization is a useful.

An instrumental approach views participation as a *means* to achieving better cost-effectiveness, living standards, etc., while an empowerment approach values the process of increasing participation as an important *end* in itself. (1998, p. 9)

Other researchers have addressed the ends versus the means issue. Campbell and Salagrama echo this view when they offer three categories of participation: *functional*, *empowering*, and *philosophical*. According to the authors, functional participation

addresses issues of efficiency and effectiveness; empowering participation encompasses independence, awareness, and increased capacity; and philosophical participation allows for the expression and recognition of alternative world-views (Karl, 2000).

The World Bank suggests three categories of roles to be played by rural poor, based on their level of empowerment. They are as follows:

- Beneficiaries: recipients of services, resources and development interventions through such things as community organizing, training and one-way flows of information.
- Clients: capable of demanding and paying for goods and services from government and private sector agencies. World Bank-supported development interventions at this stage focus more on building sustainable market-based financial systems, decentralizing authority and resources, and strengthening local institutions.
- Owners and managers of their assets and activities: the highest stage in terms of the intensity of participation involved (World Bank 1996).

Deshler and Sock (1985) reviewed the development participation literature and found that, although support and advocacy for participation were high,

few studies are available with a rigorous analysis of the phenomenon. Concepts, measures and indicators of rural development participation are lacking, as are theories, definitions and conceptual frameworks for empirical validation or formulation of hypotheses (1985, p. 1).

They used concept mapping to identify a key theme, ““extent or control of power”” exercised by participants in various conceptualizations” (p. 4). They created four different types or categories of participation: “domestication, assistencialism, cooperation, and empowerment” (p. 5). Deshler and Sock then grouped these four types of participation into two major categories: pseudo-participation, that includes domestication and assistencialism; and genuine participation that includes cooperation and empowerment.

Pseudo-participation

- Domestication: involves informing, therapy, and manipulation
- Assistencialism: includes placation, and consultation.

Genuine participation

- Cooperation: refers to partnership and delegation of power
- Citizen control: which means empowerment.

Pseudo-participation occurs in development when decision-making power and control of the project rests with planners, administrators, and community elites.

Genuine participation occurs when the development bureaucracy, local elites, and the people work cooperatively throughout the decision-making process, and when the people have the power to control the action to be taken (White, 1994).

Jules Pretty (1997) presented a seven-step typology of participation ranging from passive participation to self-mobilization. This particular typology is useful in its presentation of a detailed range of possibilities for participation; however these distinctions seem rather theoretical and fail to acknowledge the dynamic nature of people and situations. Pretty's language indicates that he intends this typology for consumption by researchers and administrators rather than those expected to participate.

He characterizes *passive participation* as that of individuals whose role is to listen to external professionals explain what will, or already has happened. At this level, individuals have no input into the process, and are only receivers of information. The next level, *participation in information giving*, shows people participating by providing researchers data determined to be of importance by researchers. At this level, people have no power over how the investigations are conducted and no relation to the outputs. The third level, *participation by consultation*, still reflects dominance in

decision making by outsiders. Insiders may be consulted about their views, which researchers may take into account, but have no authority to impact proceedings. Level four, *participation for material incentives*, describes nominal participation by insiders who are expected to contribute (land, labor, inputs) in return for goods or services designed by outsiders to help them. Pretty points out that this type of participation often ends when the outside incentives dry up. Level five is *functional participation* in which he describes individuals adopting collective action—forming groups—to meet some existing objectives. These groups are not internally derived or driven, but created and managed by outside facilitators. Level six is *interactive participation* that includes insiders in the situation analysis stage of the project cycle and allows for their planning and implementation of initiatives. In this stage locally induced institutions or groups exercise authority in determining priorities and decisions. The seventh type of participation identified by Pretty is *self-mobilization*. At this stage, insiders take initiative to address issues that they deem important. They reach out to known institutions rather than waiting for change agents to approach them. Pretty acknowledges an important point in his description of this type of participation, that even self-mobilization may not recognize or address existing inequities (Veldhuizen et al., 1997, p. 42).

Lilja and Ashby's (1999) typology identifies levels of participation by accounting for decision-making authority and communication between scientists and farmers in research and innovation processes. They suggest that "organized communication" plays a role as a "well-defined methodology for carrying out a procedure (informal surveys, transect walk, etc. as well as formal surveys)." It is treated as either one-way,

where farmers respond to researcher driven inquiries, or two-way where either side may initiate, and follow-up, on inquiry in an effort at mutual understanding.

They suggest five possibilities for interaction between and within these two categories of participants. Grounded firmly in a research context, their typology ranges from scientist dominated approaches to those where ultimate decision making authority rests with farmers. Their first category of participation, *on-farm research*, refers to scientist-controlled processes “without organized communication with farmers.” The second category is considered *consultative* whereby decision-making authority rests with scientists but farmer input is solicited. In this type of participation, scientists have an understanding of farmers’ perspectives, but may not incorporate this information into their decision-making. The third category of participation is *collaborative* where farmers and scientists share decision-making power. In this case, neither side makes unilateral decisions, or can renege on those jointly made decisions. Joint decision-making is based on mutual understanding grounded in two-way communication of opinions, preferences, and priorities. Type four is *collegial* participation. As the name implies, farmers and scientists in this type of process are envisioned as colleagues. Farmers are aware of scientists’ perspectives and may or may not incorporate those views or concerns into their decision-making. Scientists in this process often act as facilitators or resource persons for farmers who control the situation and can renege on decisions as they choose. The fifth type of participation, *farmer experimentation*, suggests a process whereby farmers have sole decision making authority, with no organized communication with scientists.

Although useful, typologies themselves may have become part of the problem. In suggesting that participation is losing the edge it may have had as an effective and flexible approach, Guijt and Shah identify pitfalls of existing typologies.

1. “Wrong assumption of a static picture.” In reality change is constant as will be all resulting participation.
2. “Simplifying difference in terms of ‘insider and outsider.’” This distinction helps hide differences within either of these groups, and is particularly dangerous when all insiders are considered the same.
3. “Normative assumption of an ‘ideal’ form of participation.” The implication that some participation is better than others leads to a best type, towards which every project must work.
4. “Ignoring diversity.” When participation is categorized, artificial boundaries are created between types. In all likelihood, the quality of participation—however measured—will change throughout the lifecycle of projects or interventions. (1998, p. 9-10).

Reviewing typologies suggests a tendency toward best practices for a limited number of stakeholders in the process, namely practitioners and recipients. Typologies are rarely flexible enough to cover the range of stakeholders who enter and exit throughout the processes of project design, delivery, implementation, and evaluation. In addition, in presenting a continuum of options, few typologies suggest which particular approach to use in a given situation to achieve a particular result.

Sarah White (2000) created a framework that associates approaches to incorporating participation with a particular function or rationale for doing so. She offers two perspectives for each approach, top-down, where power resides in the hands of institutions or agencies, and bottom-up where power resides in the hands of those historically considered recipients. By incorporating multiple approaches, multiple perspectives, and power differentials, her framework acknowledges that participation is political and based on the power to decide. Like Chambers (1997), Cleaver, (1999),

and Guijt and Shah (1998), White recognizes that participation is inherently political, with the more powerful stakeholders typically dictating conditions of participation to the less powerful. While not always visible or malevolent in nature, questions of power are never far from participatory development projects. An invitation to participate is rarely an invitation to participate equally, benefit equally, or share equally in the risks associated with the project. White acknowledges that while an invitation to participate offers entrée, it does not guarantee a shift in the balance of power, nor is always meant to. White distinguishes between approaches in terms of their function or rationale while indicating the diversity of interests and power inherent in participation.

As shown in the first column of Table 2-1, White's framework distinguishes four forms of participation. The second and third columns delineate varying interests in participation, with column two highlighting the interest of those who design and implement a development intervention (top-down), and the third column highlighting the interests of the participants (bottom-up). These columns indicate how stakeholders perceive their participation and what they expect to get out of it. Interest of both the top and bottom can be likened to an agenda-what their expectations and goals are for participating in any given development intervention. The fourth column shows the overall function or rationale for each type of participation. White specifies a range of approaches to treating participation and indicates interests of the top (more powerful) and interests of the bottom (less powerful) according to desired outcomes (legitimation, efficiency, sustainability, and empowerment).

Table 2-1. White's Framework

FORM	TOP-DOWN	BOTTOM-UP	FUNCTION
Nominal	Legitimation	Inclusion	Display
Instrumental	Efficiency	Cost	Means
Representative	Sustainability	Leverage	Voice
Transformative	Empowerment	Empowerment	Means to an end

Source: White, 2000, p. 144.

Nominal participation can be equated with passive participation. The top uses this approach to legitimize or support itself by solving problems for the less powerful. Efforts are taken to convince target audiences (the bottom) that their needs are being met. Decision-making authority rests solely in the hands of a power structure and the target audiences remain passive recipients throughout the development process. For example, asking farmers to identify their own needs, then implementing a pre-existing program that may or may not address them is nominal participation by farmers.

An instrumental approach to participation is based on achieving efficiency by way of better-targeted interventions and more appropriate use of technologies. Those within the power structure seek information or input from the target audience in an effort to better understand their needs, and thus design an intervention that attempts to address these needs. An instrumental approach can be considered consultative in that target audiences may be seen as initial contributors to the process even though they remain peripheral to most decision-making. This situation is common in agricultural research where researchers design and administer a survey reflecting their own priorities and incorporate farmers' input into their research.

Representative participation promotes a collaborative relationship between the power structure and target audience in hopes that the latter will carry on the process after planning and initiation by the former. This approach differs from the previous two

in that some decision-making responsibility, and thus power, is transferred to the target audience throughout the process. Nonetheless, power still resides with the outsiders who drive the process and expect audience members to take advantage of the opportunity to contribute to their own well being, the opportunity to participate. Successful agricultural research projects have used this approach resulting in farmer centered and led research groups (Ashby, 2003).

Transformative participation is equated with empowerment. Those previously treated as audience members control and own decision-making processes in this approach. The relationship between insiders and outsiders is considered collegial with insiders ultimately driving the process while developing and recognizing their capacity to address further needs and situations as they arise. The obvious paradox found in the far right spectrum of this empowerment approach - power structures instituting a process to change the power structures - means that few development interventions are designed with a truly transformative approach in mind.

While White's framework fills a void in participation theory and literature, it treats stakeholders as two dimensional (top or bottom), and fails to address project phases, stages, or activities that correspond to different approaches. In reality, participatory development projects have multiple stakeholders who function between top and bottom, and whose position may shift depending on the sequence of activities to be undertaken. This study explores two such projects.

This review of typologies suggests the range of possible criteria for categorizing participation. Some typologies are more specific than others, and most are directed at specific audiences. They are thus written in a particular language. Nonetheless, taken

together they represent countless hours of experience, reflection and analysis of participatory processes within the field of development. And more importantly, they inform policy makers, programmers, and practitioners of the possibilities and pitfalls of participation.

Agricultural Extension

Agricultural extension systems serve farmers by making “scientific knowledge available to all who need it” (Seever, Graham, Gamon, and Conklin, 1997, p. 3), and exist in virtually every developed and developing country (Rivera and Schram, 1987). Agricultural extension began in the United States in 1914, and throughout its history “has encouraged invention, experimentation and education” (Seevers et al., 1997, p. 15). The U.S. system is characterized as university-based because statewide research and extension activities are coordinated by each state’s Land Grant University (Seevers et al., 1997; Warner and Christenson, 1984). Extension in the U. S. is administered locally at the county level.

In contrast to the U. S. system, ministry-based extension dominates agricultural outreach in the rest of the world. According to FAO, this system provided more than 90 percent of all extension services in 1993 (FAO, 1993). This system considers agricultural extension as a service of the national government, and aims to improve agricultural productivity for the benefit of both producers and consumers (Nagel, 1997; Pickering, 1987). Ideally, such public extension is developed to serve the needs of all types of farmers in a country (FAO, 1993).

In most countries, extension and research exist as separate divisions under the Ministry of Agriculture and often have weak linkages with each other (Cernea, Coulter

and Russell, 1985; McDermott and Andrew, 1999; Pickering, 1987). Information that gets transferred is often outdated or not pertinent to the farmer's situation (Nagel, 1997). EOs are often responsible for a large geographic area encompassing a wide-range of farmers in terms of agro-ecosystems, socioeconomic status, and livelihood systems. In addition, EOs often enter the field with only a few years of technical training and little or no understanding of participatory techniques for incorporating farmer input. This may lead to a limited understanding of farmers' problems, and difficulty prioritizing those issues for research (Collinson, 1985; Gomez, 1985). Large-scale commercial farmers often have more interaction and influence with government research bodies, but small-scale farmers are virtually unseen by researchers (Baxter, 1987; Jain, 1985).

Traditional top-down extension can be a constraint to equitable distribution of resources (Berger, DeLancey, and Mellencamp, 1984; Saito and Spurling 1992). The biased perspective of policy makers and practitioners alike reinforces a research-extension continuum that limits the value of extension to women farmers (Dwyer and Bruce, 1988; Weidemann, 1987). By misdiagnosing the contributions of female farmers, policymakers, researchers and extension have failed to understand and address their unique challenges. Research and extension have perceived the household as a cooperative unit with consensus on goals and objectives as articulated by a male head. This generalization has caused the system to miss the differences that exist between members of a household, or between various household types (Dwyer and Bruce, 1988).

Several factors limit women's access to extension including systemic bias and the realities of women's lives. Extension often fails to address issues of concern to female farmers, or assumes that their concerns mirror those of their male counterparts. However, in Honduras, Colverson (1996) found a discrepancy between the training offered and the training that women indicated they desired. Research and extension typically devote a majority of resources to increasing cash crop production, often at the expense of food crops that women produce for household consumption or local sale (Saito and Spurling, 1992).

Agricultural extension in St. Lucia and Dominica are ministry-based divisions following the model of most British Commonwealth countries (FAO, 1993). St. Lucia and Dominica each have a Director of Extension who is responsible for oversight of all frontline staff, organized into regional teams. Extension in each country relies on limited research from within their own MOA, as well as from other institutions such as the University of the West Indies (UWI), the Caribbean Agricultural Research and Development Institute (CARDI) and other international agricultural research centers. Their extension approach has been categorized as top-down with limited effectiveness in meeting farmers' needs (FAO, 1999b, 2000).

Given extension's role as the outreach arm of the MOA in St. Lucia and Dominica, FAO developed projects to reorient their approach to serving farmers. FAO's project plans (discussed in detail in Chapter 5) sought to train EOs to facilitate greater farmer participation in extension program planning and delivery. The first step of this training for reorientation was familiarizing EOs with PRA (FAO, 1999b, 2000).

PRA

As development policies and priorities shifted during the last forty years, so did approaches to understanding local realities. According to Ellis, “the shift is from the general to the particular, from seeking solutions with widespread application to addressing specific problems in a limited context, from implementing solutions from above to permitting solutions to be generated from below (2000, p. 27). Structural adjustment and market liberalization policies were accompanied by the advent of an ‘actor-oriented,’ or participatory philosophy of working with intended beneficiaries (Chambers, 1997; Ellis, 2000).

Rapid Rural Appraisal (RRA) emerged in the 1970s as a methodology for collecting accurate, location-specific information, more quickly and less expensively than formal survey methods (Chambers, 1997; Ellis, 2000). RRA did not use structured questionnaires or surveys, and adopted a systems-oriented approach to understanding realities of rural populations. RRA helped researchers recognize and retain site-specificity in terms of agro-ecosystems, seasonality, gender issues, and diversity among households and individuals.

By the mid-1980s, RRA was evolving into PRA. This shift signaled an expansion from data collection to encouraging local actors to participate in diagnosing and addressing their own needs (Blackburn and Holland, 1998; Chambers, 1997; Ellis, 2000). PRA has been defined as “a family of approaches that enable people to express and analyze the realities of their lives and conditions, to plan themselves what action to take, and to monitor and evaluate the results” (Chambers and Blackburn, 1996, p. 1).

Table 2-2 compares key aspects of RRA and PRA, indicating common elements of each.

Table 2-2. RRA and PRA compared

	RRA	PRA
Major development	Late 1970s, 1980s	Late 1980s, 1990s
Major innovators in	Universities	NGOs
Main users	Aid agencies, Universities	NGOs, Government field organizations
Key resource earlier overlooked	Local people's knowledge	Local people's capabilities
Main innovation	Methods	Behavior
Outsider's mode	Eliciting	Facilitating
Objectives	Data collection	Empowerment
Main actors	Outsiders	Local people
Longer-term outcomes	Plans, projects, publications	Sustainable local action and institutions

Source: Chambers (1997, p. 115).

PRA is associated with a diverse set of field methods designed to elicit information and involve community members in setting priorities for projects and policies. Methods and tools associated with PRA include (1) group discussions; (2) wealth ranking; (3) maps; (4) transect walks; (5) timelines and trend analysis; (6) seasonal calendars; (7) matrix scoring; and (8) Venn diagrams (Chambers, 1997; Ellis, 2000). PRA is a collaborative learning experience based on reversals of power. Local perspectives replace outsiders' as drivers of the process. Chambers refers to this reversal as 'turning over the stick' and allowing intended beneficiaries to lead processes of change (1997). "The emphasis of these methods is on active involvement by respondents, the outsider as learner rather than teacher, and qualitative prioritizing or ordinal ranking of variables and options, instead of quantitative measurement of them" (Ellis, 2000, p. 193).

PRA has been widely used in Africa, Asia, and Latin America by NGOs, aid agencies, government ministries, and local communities (Chambers, 1997; Ellis, 2000; Humble, 1998; Paul, 1998; Thomas-Slayter, 1995; Wordofa, 1998). It has been used to diagnose and address issues as diverse as rural health care planning and delivery in Ethiopia (Wordofa, 1998); revitalizing farmers' organizations in Estonia in the early 1990s (Thompson, 1998); and reorienting agricultural extension services to be more responsive to farmers' needs in Grenada (Eckman, 1990).

As a more participatory form of development, PRA calls for outsiders to act as catalysts for local people to decide what they want to do with the information generated (Blackburn and Holland, 1998). This requires outsiders engaged in the process to treat local people as subjects, rather than objects, of their own development, and "pay particular attention to the way they behave when interacting with local people" (Blackburn and Holland, 1998, p. 7). One of the strengths of PRA is its flexibility as a methodology (Chambers, 1997). Rather than using a prescribed set of tools and techniques, PRA is designed to be responsive to findings as they emerge (Slocum and Thomas-Slayter, 1995). This requires skilled facilitators and collaborators who treat participants as partners rather than subordinates.

Summary

This review of participation literature explored elements of its emergence as a challenge to the status quo in development principles, policy, programs, and practice. It included justifications, shortcomings and typologies to illustrate that participation means different things to different people. These differences in interpretation, and their implications, are central to this research.

The combination of gendered political ecology and participation literature created a theoretical framework for this research that justifies a multidisciplinary perspective on agricultural development projects. The framework gives legitimacy to examining people's participation in relation to economic, social, political, and ecological factors without giving *a priori* weight to any one of them.

A basic accounting of participation is necessary as this dissertation proceeds through the methodology used for examining participation in this study (in Chapter 3), establishing the political ecological context for that examination (in Chapter 4), as well as conceptualizing and dissecting participation as a process (in Chapter 5).

CHAPTER 3 METHODOLOGY

This chapter establishes the methodology used in this research. After a brief introduction, it presents principles and justification for combining qualitative and feminist research approaches. Description of the data and specific research procedures are followed by gendered political ecology and process analysis frameworks adapted for this study. This is followed by an indication of the data utilized to address the research questions and objectives presented in Chapter 1.

While a great deal of research has been done on participation in agricultural development, the majority of existing resources is centered on tools and approaches for facilitating farmer participation (e.g., Ashby, 2003; Chambers, 1997, 1998; Pretty, 1995). Although literature exists on the rationale for incorporating participation in development (see Chapter 2), few studies have taken a holistic approach to exploring how these efforts are planned and delivered. In particular, interactions—determining target audiences, setting objects, staffing, and decision-making—between groups of stakeholders within the hierarchy of development (policy makers, donors, administrators, planners, practitioners and target audiences) have received little attention. Even less attention has been paid to relationships among these processes of incorporating participation in agricultural development within specific gendered political ecologies like St. Lucia or Dominica, and for good reason. “One of the challenges facing an ex-poste study of innovation is that there is no evidence left of the

critical steps in the innovation process, and that people have forgotten about them” (Douthwaite, Keatinge and Park, 2002, p. 110). This study gathered and analyzed just such evidence.

Qualitative Research

This study examines stakeholder interactions in two participatory agricultural development projects against the backdrop of gendered political ecology in St. Lucia and Dominica. This study provides a link between procedural aspects of incorporating stakeholder participation in agricultural development projects and the specific gendered political ecology context within which these processes took place. As such, it is holistic, qualitative and descriptive in nature. Qualitative approaches allow researchers to begin with general research questions rather than with specific hypotheses, compile large amounts of observation, narratives, and interview data from participants, examine these data in order to organize them into coherent forms, and tell the story that explains the phenomena they have studied (Leedy and Ormrod, 2001). This study has been undertaken according to this process.

Qualitative research is typically used to “answer questions about the complex nature of phenomena, often with the purpose of describing and understanding the phenomena from the participants’ point of view,” as is the case in this study (Leedy and Ormrod, 2001, p. 101). It “implies a direct concern with experience as it is ‘lived’ or ‘felt’ or ‘undergone,’” and seeks to transport the reader to the scene by telling an evocative story (Sherman and Webb, 1988, p. 7). Qualitative research listens for the voices of those studied, within the context(s) in which they exist, rather than controlling

for or excluding influencing factors. Qualitative researchers seek to discover new insights into phenomena in their natural settings.

Patton (1990) identifies several types of qualitative research including basic research, designed to contribute to the existing body of knowledge, and applied research for illuminating societal concerns. In this tradition, this study leans toward applied research because in addition to understanding and explaining a phenomenon, it aims to generate potential solutions for application to real-world problems and experiences.

Patton's perspective on qualitative research is considered applied—he uses the term evaluative—in that it is designed to “inform action, enhance decision making, and apply knowledge to solve human and societal problems” (1990, p. 12). According to Patton, questions in applied research emerge from the problems and concerns experienced by people. Accordingly, the challenge of evaluative research is to get the best possible information to the people who need it in a way that they can use it to address real world issues. This research is designed for just that purpose.

The need for this study to stay grounded in the empirical world led to qualitative research methods and this researcher's roles led to a theoretical orientation in heuristic inquiry. This tradition is appropriate to this study because it brings to the front the personal experience and insights of the researcher. “Heuristic inquiry asks: What is my experience of this phenomenon and the essential experience of others who also experience this phenomenon intensely?” (Patton, 1990, p. 71). This orientation emphasizes meanings and knowing through personal experience, and treats the researcher as the primary instrument in qualitative inquiry, demanding that the

researcher “have personal experience with and intense interest in the phenomenon under study” (Patton, 1990, p. 71). Although focused on the experience of the researcher, heuristic inquiry requires that others whose actions or reflections are among the phenomenon being observed share the experience. Patton claims “rigor of heuristic inquiry comes from the systematic observation of and dialogues with self and others” (1990, p. 72).

Feminist Research

This research is grounded in—and built on—my experiences and reflections on basic social structures and processes. The intersection of heuristic- and feminist theories recognizes experience and education as sources of knowing (Harding, 1991; Patton, 1990). Diverging from the inductive nature of qualitative research, heuristic inquiry can be oriented toward a particular perspective such as feminism. In doing so, Patton claims, “orientational qualitative inquiry begins with an explicit theoretical or ideological perspective that determines what variables and concepts are most important and how the findings will be interpreted” (1990, p. 86). A feminist perspective in heuristic inquiry assumes that power differences exist within social structures and manifest themselves in social processes and interactions (Glesne, 1999).

Feminist approaches to research directly challenge the dominant, positivist scientific paradigm by placing women’s ‘problems’ at the center of the research process, designing the research to address these problems, and “placing the researcher in the same critical plane as the research subjects” (Harding, 1987, p. 181). Feminist research assumes that gender is a key dimension of human societies and cultures. Research that ignores gender or treats it in the context of family or sex roles, for

example, “do[es] serious disservice to our understanding of social and cultural dynamics” (Gailey, 1998, p. 205). Feminist research is grounded in women’s everyday experiences, addresses ethical questions in research such as power differentials, places the researcher within the research in order to recognize the influences of cultural beliefs and behaviors, and challenges dominant scientific philosophy and practice along the way.

Feminist research does not exclude men, nor does it start with men and extrapolate to women. Feminist research seeks to reflect diversities of both male and female realities. A concern with gender does not mean segregating women and men. It means being able to focus on men and masculinity, in order to research the powerful as well as the powerless. Feminist researchers accomplish this by hearing voice of their subjects, acknowledging their own positionality, and practicing critical reflection and self-reflection (Harcourt, 1994; Hartman, 1991; Naples, 2003; Rosser, 2000).

This is an applied research study that seeks to find solutions to issues around incorporating participation in agricultural development identified in Chapters 1 and 2. This is an in-depth study of: (1) the actions and interactions of individuals comprising stakeholder groups; (2) decision-making within and between key stakeholder groups; (3) the processes that resulted from these decisions; and (4) the influence on these interactions and decisions of gendered political ecology of St. Lucia and Dominica. Each of the two projects is an individual case, consisting of the same phases or components, identified by FAO and undertaken under by contractors under FAO supervision. Quantitative data on the *processes* being studied do not exist; therefore

quantitative analysis representing stakeholder interactions and decision-making was not possible.

Issues of reliability and validity in this research must be addressed. While heuristic and feminist inquiries allow the researcher to be part of the phenomenon studied, efforts must be made to ensure that others can judge the outputs with some certainty. This study includes several verification procedures to help ensure validity. These procedures include, (1) prolonged and intense engagement as expressed in heuristic inquiry (Patton, 1990); (2) clarification of researcher subjectivity according to feminist inquiry (Gailey, 1998; Harding, 1991); (3) rich, thick description of the phenomenon being examined; (4) member checking by sharing analytical thoughts and drafts with other participants; and (5) triangulation by using multiple data collection methods, sources, and theoretical perspectives.

According to Glesne, “multiple-data collection methods is the most common form of triangulation in qualitative research” (1999, p. 31). This is undertaken to relate different kinds of data “to counteract the threats to validity identified in each” (1999, p. 31). In addition to multiple data collection methods used in this study—participant observation (field observations), interviewing participants, and document collection—multiple kinds of data sources and multiple theoretical perspectives were used. Sources of data were written records of field observations of decision-making among stakeholder groups during the projects, documentation of these processes produced for FAO, and secondary data pertaining to St. Lucia and Dominica. Theoretical perspectives employed in this study include gendered political ecology and its effect on implementing participatory development, and stakeholder participation.

The researcher's role as a participant in the study projects raises questions about objectivity. However, as Patton (1990), Naples (2003) and Wolcott (1990) suggest, the best way to address this issue is by being explicit about the researcher's role in the study. The researcher was a graduate student contracted by FAO and the University of Florida as a consultant on both study projects, as a project team member in St. Lucia and as project leader in Dominica. As presented by Patton, evaluator effect pertains to the impact of the presence of an evaluator on a process being evaluated; how does their being there as a researcher affect the process. Given that evaluation of the study projects did not begin until after completion of the second project, evaluator effect is likely to not be relevant.

Research Questions

This study addresses the following research questions:

1. How did the confluence of political, economic, social and ecological factors in St. Lucia and Dominica contribute to the need for intervention?
2. Who were the stakeholders in each project and how did they participate in the different phases of each project?
3. How did interactions within and between several stakeholder groups affect outcomes of each of the participatory development projects in this study?

Objectives of this study are

- Objective 1: Conduct a gendered political ecology analysis of St. Lucia and Dominica. Identify major themes, and associate their historical emergence with the current situation.
- Objective 2: Identify key stakeholders in each of the study projects including their stake and expectations of the projects.
- Objective 3: Identify and document decision-making processes undertaken in preparing for, implementing and reporting on each phase of the two study projects. Indicate how stakeholders did or did not participate in decision making throughout both projects, including who participated, how, when, and who facilitated their participation.

- Objective 4: Determine what led to conflict and/or collaboration in each project, how it was managed, and how that impacted outcomes.

The Data

The data for this study come from two development projects conducted for FAO and have been obtained according to Patton's requirements for qualitative data collection: "(1) in-depth, open-ended interviews; (2) direct observation; and (3) written documents" (1990, p. 10). The data are derived from fieldwork, from the perspective of a participant observer who engaged in the activities under examination. The data include direct quotations from people about their experiences, detailed descriptions of people's activities, behaviors and actions, and "the full range of interpersonal interactions and organizational processes that are part of observable human experience" (Patton, 1990, p. 10).

Data compiled during the study projects are listed in Appendix A and consist of project plans and terms of agreement from FAO, e-mail correspondence, field notes, calendars of activities, meeting notes, and numerous written reports detailing activities, behaviors, and actions of participants in St. Lucia and Dominica. Additional data resulted from fieldwork with EOs. These include farmer demographic, socioeconomic, agro-ecological, and livelihood data. These data tell the procedural story of the projects in St. Lucia and Dominica and are augmented by secondary data to supply the gendered political ecology contexts.

Procedures

The data collected and analyzed for this research were derived from project planning and implementation in St. Lucia, January through August 2000, and similar processes for Dominica from December 2001 through April 2002. Secondary data sufficient for establishing gendered political ecologies of St. Lucia and Dominica were compiled beginning in January 2003.

The first research question addressed by this study—How the confluence of political, economic, social and ecological factors in St. Lucia and Dominica contributed to the need for intervention—is informed by secondary data sources and field notes derived from both projects. Secondary data sources included literature on historical, economic, political, ecological, and social factors in St. Lucia and Dominica. The data were based on ethnographies, census, and historical accounts. The MERGE framework was used to identify and organize relevant data into three dominant themes that explain the situation in St. Lucia and Dominica at the time of the study projects. These themes are presented in Chapter 4 and meet Research Objective One.

The second and third research questions in this study—Who were the stakeholders in each project and how did they participate in the different phases of each project? How did interactions within and between several stakeholder groups affect outcomes of each of the participatory development projects in this study? —are addressed by analysis of project data. The MERGE framework was used to analyze and organize project data according to local level stakeholders, project activities, and gendered natural resource use patterns derived from fieldwork.

All available project data (see Appendix A) were sorted by country and date.

Documents pertaining to St. Lucia were reviewed in search of a logical delineation of project activities. The emergent list was compared to documents from Dominica and resulted in a chronological list of activities common to both projects. They are as follows:

1. Pre-departure research and planning

This phase covered activities such as identification of project team members, proposal preparation and submission, background research on current and historical conditions in the target country, identification of available resources, and listing necessary information not available through U.S. based research. This phase lasted nearly three months.

2. Training design and delivery

This segment of the project involved interpreting and synthesizing expectations of FAO into a five-day training design, creating session plans, and delivering the training. This phase lasted approximately six weeks.

3. Field work, interviews and focus groups

This phase was comprised of fieldwork, individual farmer interviews, and focus groups. The project teams and personnel from collaborating agencies in St. Lucia and Dominica undertook these activities.

4. Data synthesis and analysis

This phase encompassed finalizing field-data entry, synthesis, and analysis by project teams and EOs. It included planning and delivery of a final workshop for presenting findings of the fieldwork to the FAO representative and MOA personnel.

5. Final Wrap-up

This phase represented production and dissemination of final outputs to project partners according to contractual obligations, and lasted nearly three weeks.

Each of these phases was further divided into sub-activities according to project documents, project plans and calendars from both projects (see Table 3-3 for the resulting project analysis framework to be used in Chapter 5).

Organization of project phases and activities was followed by identification of stakeholder groups represented within the data. Once stakeholder groups were identified and delineated, data pertaining to each were examined for evidence of their

expectations and interests in the overall projects, and for each project phase and activity. The results of this step responded to Research Objective Two.

All project data from each country were identified and indexed to indicate which phase and specific activity to which they pertained. The resulting groups of data were examined for distinct *procedural decisions* within each activity, and associated with the stakeholder groups that made them, which other stakeholder groups they impacted, and how. These decisions, who made them, with whom, affecting whom, and resulting outcomes met Research Objective Three.

Data were further sorted according to stakeholder group, project phase, activity, and decision making to discern examples of power sharing, collaboration, expectations, or conflict among stakeholder groups within the project analysis framework. This step met Research Objective Four.

Similarities between the countries, the projects and the personnel involved led to hypothesizing about similarities and differences between the two projects, and what accounted for them. A review of literature on participation in development along with further critical reflection with other project personnel produced anecdotal accounts and explanations for the variation within and between the two projects. While explanations remained elusive, ideological, contextual and procedural differences between the two projects began to emerge and highlighted some potentially important issues.

White's (2000) framework of approaches to incorporating participation illuminated a number of the ideological issues that had emerged. Her typology of participation was useful for examining *procedural aspects* of incorporating stakeholder participation in development. Her framework presents a value-neutral continuum of

participation, thereby eliminating the need to determine good, better or best practices. The framework also accounts for stakeholders at many levels, and allows for analysis of interactions among all levels of decision-making authority.

Contextual issues pertaining to the study projects fit well within political ecology and specifically within the MERGE framework (Schmink, 1999). Gendered political ecology allowed for incorporating political interests and struggles, and unequal relations of power in mediating access, control and conflict in resource use, which were at the heart of this study. The procedural differences proved very interesting given the contractual and staffing similarities between the two projects and proved more difficult to disentangle.

Gendered Political Ecology Framework

As indicated in both the introduction and literature review, this study used a theoretical framework within which to examine stakeholder decision-making and interactions based on gendered political ecology and participation. In addition to being a conceptual framework as presented in Chapter 2, the MERGE framework serves as an analytical tool when applied to conservation projects. However, because the framework was designed for community based conservation and not agricultural development, it needed adaptation to be a useful analytical tool for this study. The structural integrity of the framework was maintained in terms of the progression of levels of analysis beginning with political ecology analysis, and continuing with macro level stakeholder analysis, stakeholder analysis within the community, gender relations and resource analysis, and project analysis. However, the specific questions posed within each of these levels of analysis needed to reflect the site-specific nature of the

study projects: participatory agricultural development, rather than community-based conservation. As such, each level of analysis now includes research questions that reflect planning and delivering participatory development projects in St. Lucia and Dominica.

Table 3-1. Adapted MERGE Framework, Section I.

Type of Analysis	Research Questions
Political Ecology Analysis: <i>The potential for participatory development is constrained or enhanced by historical, ecological, cultural, socioeconomic and political factors at diverse scales.</i>	<i>Historical</i> What are the key historical periods that have shaped current socioeconomic and agro-ecological conditions? <i>Political</i> How are these periods distinguished by changing government policies? <i>Socioeconomic</i> What are the connections to international, national, regional and local markets for local resources? Which groups have been involved with these markets historically, and what was their relationship? <i>Cultural</i> How have patterns of land use and resource use changed during different historical periods? <i>Ecological</i> What are the key agro-ecosystems in this setting? How are they being used and how is that use changing? What kinds of production areas or zones exist and how are they managed?
Macro-level Stakeholder Analysis: <i>Multiple stakeholder groups are involved in direct or indirect negotiation for input into agricultural program planning. Their interests may be complementary and/or in conflict.</i>	Who are the stakeholders in the agricultural sector? How are their interests defined? How do they conflict? What are the possible bases for cooperation or complementarity? How were they involved in historical agricultural practices and policy? What state and non-governmental organizations are involved in the area? What community organizations exist? What kinds of property regimes and resource management institutions currently exist? For which groups do they regulate access/control to key resources?

Source: adapted from Schmink, 1999.

In addition to setting the political ecological stage for this study, the adapted MERGE framework served as an analytical tool as well. Given the importance of context and process to this study, I divided the framework into two discrete sections, the first of which relates to context while the second relates to process. The first section of the analysis, presented as Chapter 4 combines (1) gendered political ecology analysis of the study countries and (2) macro-level stakeholder analysis. Presenting these levels of analysis together is justifiable because they explain the combination of events, decisions, and decision makers who are responsible for the current reality in St. Lucia and Dominica. By following the adapted MERGE analytical framework, Chapter 4 allows for critical examination of factors that affect current resource use strategies.

The second section of the adapted MERGE framework, focusing on process, is presented in Chapter 5 and is used to analyze site specific conditions within the agricultural sectors of each country as well as activities of and interactions between the subjects of this study. This section begins with local-level stakeholder analysis and proceeds with project analysis, and gender relations and resource analysis (see Table 3-2). The first two levels of analysis in this section were informed by data derived from the study projects through participant observation. The third level, gendered resource use analysis, is based on survey and focus group data collected and analyzed during the projects in St. Lucia and Dominica. By design, Chapter 5 analyzes decision making by stakeholders actually present during the projects including representatives from the sponsoring agency, the project team, MOA personnel, EOs, and farmers.

Table 3-2. Adapted MERGE Framework, Section II.

Type of Analysis	Research Questions
Micro-level Stakeholder Analysis: <i>Participation by different groups within local communities can sustain or contribute to improved agricultural livelihoods.</i>	What scales are involved in community-based agricultural development efforts? In what ways does each community participate? Within the community, who participates and how? Who are the relevant stakeholder groups within heterogeneous communities? Who represents them? Which local groups have been empowered? What kind of support or benefits do they receive? How are their activities affected? In which decisions have they participated? How long has local knowledge been recognized and incorporated in planning?
Project Analysis: <i>Mutual learning processes improve the ability of local actors to negotiate their interests in agricultural livelihood security.</i>	How has agricultural development planning been done in the past? Who were the key actors (outsiders/local) and how did they interact? What were the defined objectives? How was the project implemented? What problems arose and how did they affect the project? What kinds of training experiences have been offered to stakeholders? To whom: #s, types and representation of participants? For what purpose? In what way was a focus on gender and community participation incorporated? What were the results of these training experiences?
Gender Relations, Resource Analysis: <i>Gender roles, identities and relations differentiate people's connections with natural resources and agro-ecological systems.</i>	What are the patterns of livelihood strategies practiced by different groups of households? How do gender relations differentiate links with key natural resources and agro-ecological systems, as well as attitudes toward development? What are the key groups differentiated by gender and other key social dimensions? How do these gender differences affect resource use and agro-ecosystem function?

Source: adapted from Schmink, 1999.

Process analysis framework

The adapted MERGE framework offers the multi-faceted perspective necessary for examining participation in development projects but leaves little room for the

temporal aspects of interactions, or the dynamic nature in which actors move in and out of the action. Therefore I present a process analysis framework useful for organizing and analyzing stakeholder interactions and decision-making throughout the projects.

Table 3-3. Process analysis framework for participatory development projects in St. Lucia and Dominica.

Phase	Decision maker(s)	Decision
<i>Pre-departure research & planning:</i> 1. identification of project team members 2. proposal preparation 3. background research		
<i>Training design and delivery:</i> 1. contract analysis 2. training objectives & design 3. session plans 4. session delivery		
<i>Field work:</i> 1. structure 2. data needs 3. schedule 4. daily processing		
<i>Data synthesis and analysis:</i> 1. data entry 2. analysis 3. workshop planning & delivery 4. presentation of results		
<i>Wrap-up:</i> 1. report writing		

The process analysis framework corresponds to five distinct phases of the participatory development projects. Each phase is analyzed in terms of who was responsible for the decision, what decisions were made, and the nature of the decision making process. Analysis of these decisions and actions by stakeholders answer the research questions posed in this study and are presented in narrative form.

This study is limited by the researchers' short-term involvement in relatively long-term projects. In each case, the researcher only has data on the PRA component of the 18-month long projects. This prohibits analysis of training and implementation on all subsequent project phases.

Summary

This study is descriptive, inductive and qualitative research. The choice of feminist theory reflects commitment to research as part of a process of change that brings women (as farmers, extension officers, administrators, policy makers, development practitioners, and researchers) to the forefront of development efforts.

This research examines two projects designed to incorporate farmer participation into agricultural development projects in St. Lucia and Dominica. Both the context of the projects and the processes of designing and implementing them are analyzed. Chapter 4 presents gendered political ecologies of St. Lucia and Dominica. Chapter 5 analyzes stakeholder participation in designing and delivering the PRAs.

CHAPTER 4

POLITICAL ECOLOGY OF ST. LUCIA AND DOMINICA

This chapter presents a gendered political ecology analysis of St. Lucia and Dominica as the setting of the study projects. According to the MERGE framework, analysis of key historical periods and corresponding natural resource use patterns can serve as a road map for understanding factors that constrain or enhance efforts at participatory development (Schmink, 1999). This multi-faceted assessment is a precursor to exploring and explaining stakeholder interactions within the specific development projects in this study. While these projects were designed and undertaken against a backdrop of banana wars brought on by globalization, they cannot be fully understood independently of the historical events leading up to the current situation.

In keeping with the objectives of this study, this chapter establishes the context within which the study projects took place, and is both descriptive and analytical. It blends the first two levels of analysis suggested in the MERGE framework; political ecology and macro-level stakeholder analysis (Schmink, 1999). This chapter is divided into three sections, each of which includes historical, political, economic, social and ecological dimensions. After a brief introduction and general history of the islands, the first section follows the justification, emergence, and evolution of monocrop agriculture in St. Lucia and Dominica. The second section introduces land settlement and use patterns, with family land as a dominant land tenure system. The third section examines key events in St. Lucia and Dominica from the 1940s until present day

including nationalism, the role of Transnational Corporations (TNCs) and the banana wars.

Rather than presenting macro-level stakeholder analysis as a separate section, it is woven within each of the three sections presented here. Through the stories in this chapter, those stakeholders influential within the agricultural sector, the nature of their interests, and how their influence affected agriculture in St. Lucia and Dominica clearly emerge. The remaining levels of the MERGE framework, including gendered resource analysis and project analysis will be addressed in Chapter 5.

St. Lucia and Dominica

Dominica and St. Lucia belong to the Windward Islands chain of the Caribbean. In addition to their geographic proximity, both islands share basic geological and ecological features. They are heavily forested volcanic islands characterized by sharply rising peaks, steep slopes and fertile river valleys. They share an essentially north-south orientation with the Caribbean Sea to the west and the Atlantic Ocean to the east. As a result, both islands have cliff-ridden east coasts exposed to ocean currents. Major ports in both countries, centers of trade and commerce, are on the western, or leeward, coast. Population centers of these islands are typically along the coast, with scattered communities farther inland where topography and roads permit.

Biophysical factors limit natural resource based livelihoods in St. Lucia and Dominica. They are small countries, outward expansion is impossible, their natural resource based is finite and proximal to population centers, their volcanic origin leaves them with only a thin layer of topsoil, and they are susceptible to ecological disturbances such as hurricanes that compromise natural resources even further (Kowalewski, 1981, p. 46). St. Lucia supports over 160,000 people on 616 square

miles, much of it steeply sloping mountainside, while Dominica supports nearly 70,000 people on 754 square miles of even more rugged land (CIA, 2003).

Socioeconomic factors also limit people's ability to improve their livelihoods in these countries. Population pressure, unequal distribution of wealth and access to land, and limited market access for buying and selling goods, curtail options available to residents. Per capita Gross Domestic Product for each country was estimated at \$5,400 in 2002, and the agricultural sector employed the largest percentage of the labor force: 22% in St. Lucia; and 40% in Dominica (CIA, 2003).

These are just a few of the biophysical and socioeconomic factors facing farmers in St. Lucia and Dominica today. And when combined with historical, political and cultural factors, restrict the options available to residents trying to sustain, let alone improve, their livelihoods. This chapter tells the story of the confluence of factors that have generated the current situation, and shape future options.

British and French

St. Lucia and Dominica were 'named' by European explorers within a few years of each other in the late fifteenth and early sixteenth centuries. The first European arrivals found heavily forested islands with lush vegetation, ample water, and groups of Caribs, descendants of native South Americans. The first one hundred years of European contact were intermittent and frequently ended in violence between the Carib and Europeans. The first European settlement on either island began in the 1638 when a British councilor and some three hundred men arrived in St. Lucia and established a base. This settlement enjoyed 18 months of peace before a Carib war party arrived, seeking revenge for trouble on another island. The few settlers who survived the attack fled, effectively ending British interest in St. Lucia for another 20 years. The French

appeared in 1651 when two representatives of the French West India Company laid claim to the island. Eight years later, ownership disputes between the French and British ignited hostilities that would endure throughout the Caribbean region for 150 years. Few efforts at settling Dominica during this time were recorded. In addition to the native Carib, arrivals faced physically daunting cliffs and few coves suitable for landing.

Between the mid seventeenth and the early nineteenth centuries, the British and French fought for control of St. Lucia nearly 15 times. Dominica fared only slightly better due to less hospitable conditions. The British took St. Lucia from the French for the last time in 1803. Dominica was granted to Britain by treaty in 1805, and was the last Caribbean island to be settled. Although characterized by history as a period of fighting, Europeans had managed to establish settlements during the periods of relative peace. According to Trouillot, “between 1660 and 1805 there were long interludes of political “stability” and economic growth” (1988, p. 53). He suggests that change of administrators did not necessarily mean abandonment of settlements. For example, the French established the first permanent settlement in St. Lucia, Soufriere, in 1746, and within forty years there were 12 settlements and a large number of sugar cane (*Saccharum officinarum*) plantations throughout the island. During the American Revolutionary War, French troops drove the British out of Dominica, and found that “Caribs and runaway slaves made raids upon the English settlements for plantains, bananas, ground provisions, and stock” (Harrison, 1935, p. 69) indicating existing settlements. The prevailing economic system and natural resource use patterns survived shifting control of the territories.

British control of both islands preceded an additional thirty years of slave-based plantation production based on sugar in both territories and coffee in Dominica. In addition to estates there were numerous smallholders carving out a living from agriculture and timber extraction further in the interior during this time. Following the end of slavery in the islands in 1834, production systems and resource use changed considerably, most notably in terms of labor and land distribution. Despite those changes, residents of St. Lucia and Dominica continued reliance on an export economy based on a series of monocrops; a situation that persists.

The hundred years of British post-slavery rule in St. Lucia and Dominica (1840s to 1940s) saw shifting demographics, natural resources use, and economic development patterns. Nonetheless, it was a period of relative stability, with guaranteed, if not shifting, markets for produce, and efforts to apply technological advances to production efforts. The relative stability of this period eroded with the worldwide economic downturn of the 1930s and the beginning of World War II. The 1940s saw the rise of global nationalist ideals to which Caribbean territories were not immune, as well as Britain's need to divest itself of economic responsibility for its colonies. The 1950s can be characterized by the rise of multi-national companies, bananas, and budding regional cooperation agreements. In the 1960s, both territories were granted the right of self-governance, maintained economic and political links with regional and global partners, and continued reliance on monocrop, export agriculture. In the midst of a global economic downturn, Dominica became an independent country in 1978 with St. Lucia following gaining independence the next year.

Regional political unrest (Grenada), structural adjustment policies, and a series of devastating hurricanes tested the resilience of the people, institutions, and ecologies of the Eastern Caribbean in the 1980s and 1990s. As the weaker cousins of the regions' more powerful countries—Jamaica, Trinidad and Tobago, and Barbados—St. Lucia and Dominica adopted the same institutional and economic belt tightening prescribed by the International Monetary Fund (IMF). On the road to structural recovery in 1992, St. Lucia, Dominica, and other Commonwealth countries received bad news: U. S. based TNCs had filed suit with the World Trade Organization (WTO) to dismantle their preferential trade agreements with the British. The suit was filed in order to open the British banana market to produce from Latin American countries, brokered by Dole, Del Monte and Chiquita.

Bananas did not create the current economic crisis in St. Lucia and Dominica; they were just the last in a long line of decisions that sealed the fate of these two countries. The story is complex with socioeconomic, political, and ecological origins. Current socioeconomic and agro-ecological conditions in St Lucia and Dominica can be easily traced to European settlement patterns. Their role as agricultural islands was determined as early as the late 1600s, and common threads run through the intervening three hundred years.

Three themes deserve particular attention within a political ecology examination of St. Lucia and Dominica. The first is the history of reliance on monocrops beginning with plantation systems and continuing through peasant systems after the abolition of slavery. The second theme is settlement patterns, land use and tenure schemes over the last four centuries. The third thematic area incorporates the rise of nationalism, TNCs

and the banana wars within the last sixty years. Each of these sections contains germane historical, political, socioeconomic and ecological issues, and was selected for further investigation based on its relevance to current conditions.

The Trap of Monocrops

“The oddity of being a massive agricultural exporter while at the same time being a net importer of basic foodstuffs was structured into the Caribbean economy from the colonial epoch and continues to be a major problem today” (Kowalewski, 1981, p. 46). Having disposed of the Carib in St. Lucia, and reaching an uneasy peace with them in Dominica, European colonizers set about establishing moneymaking estates in the early 1700s. The importance of Caribbean territories to British and French economies cannot be overstated. “Caribbean colonies did not enter into international trade through the accidental discovery of new opportunities. They were created *for* trade and surplus, according to the European mercantilist design” (Trouillot, 1988, p. 22). Kowalewski suggests Caribbean islands were subjects of the earliest relatives of modern TNCs, the West Indies Companies (1981). Therefore their development and distribution of wealth has always been affected by global economic factors. Estate owners in the Caribbean were spokes in the European capitalist wheel. They bought slaves, mainly from Africa, and used them to convert raw materials into commodities needed to fuel the industrial revolution and the increasingly consumer oriented population in Europe. It was, as the saying goes, a buyers market, and the buyers lived in Europe.

Slave labor was used in the Eastern Caribbean from the early 1700s until emancipation in 1834. Women and men were purchased by estate owners, housed on the property, and used to clear land, produce and process crops, and feed and replace themselves. Cash was typically in short supply and owners could not afford to

purchase food that slaves could produce themselves. Both male and female slaves were seen as productive laborers and owners rarely differentiated between male and female labor domains. The stereotypical gender division of labor, men cultivating cash crops while women cultivate food, did not apply to plantation labor in the Eastern Caribbean (Momsen, 1993), and does not apply today (Grossman, 2000). Slave owners discouraged legal unions among slaves leading to women and their children as most common social unit in the islands. Remnants of this system are visible today in the frequency of female-headed households (36 % region-wide, United Nations, 2000, p. 42), high percentage of women and men, (22% and 19% respectively), not married by age 45 (UN, 2000, p. 26), and women's primary roles in organizing and sustaining the family (UN, 2000, p. 42).

The demand for slaves remained high in those islands under British control, where not coincidentally, plantation production centered on one or two crops—sugar in St. Lucia, and sugar and coffee in Dominica. Sugar was the first crop in St. Lucia and Dominica to turn substantial profits for plantation owners (Baker, 1994; Trouillot, 1988) and required considerable land and labor to produce. Ecological conditions in St. Lucia were more conducive to sugar production but owners in Dominica managed sizeable production on less suitable land. “Sugar came to be seen as synonymous with economic growth and the only logical investment” in the Eastern Caribbean in the mid 1700s (Baker, 1994, p. 60). This realization was bad news for laborers and the land. Sugar cane production was best done on large tracks of land, and processing sugar was labor intensive.

Planters made no attempts to improve techniques for sugar production or to experiment with alternatives. Their focus was narrowly avaricious and rapacious

and can be summed up as: Get as much as possible out of the land and the slave for nothing. The results were increasing soil erosion, dropping yields, and a horrendous slaughter of slaves from neglect, overwork, and punishment. (Baker, 1994, p. 60)

While sugar dominated plantation production in St. Lucia from the early 1700s well into the twentieth century, Dominica followed a slightly different path. As British settlers had claimed the land available for sugar production, French arrivals sought an alternative cash crop and introduced coffee in Dominica in 1740. Coffee, and not sugar, dominated exports from Dominica until the 1830s when coffee blight struck the plantations, coffee prices dropped and sugar prices rose. Having entered into global capitalism with both sugar and coffee, plantation owners in Dominica were able to reconfigure their land and labor to accommodate sugar.

From Slavery to Peasantry

Island economies continued to rely on estate-based export agriculture following the abolition of slavery, produced now by peasant laborers working for wages. Emancipation in the Eastern Caribbean in 1834 was followed by a four-year period of apprenticeship whereby all former slaves received a nominal salary for their labor, 0.5 acres and Saturdays off to produce their own food. Upon emancipation, former-slaves tended to establish themselves outside the estate boundary, on government property (Crown Lands), and began producing provisions such as sweet potatoes (*Ipomoea batatas*), tannia (*Eanthosoma sagittifolium*), plantains (*Musa sp.*), and beans (*Phaseolus vulgaris*) for sale and their own consumption. As a newly formed peasantry they acquired or appropriated small plots, enlisted the labor of family and neighbors for help producing provisions, and eventually produced exportable agricultural commodities.

According to Trouillot "Once slavery ended in 1834 and the threat of physical bondage disappeared, the Dominican cultivators sought control of the units of production, including those that did not produce for export" (1988, p. 67). His suggestion that former slaves wanted to work with and for former slaves is borne out when the end of apprenticeship brought a sudden decline in numbers of resident laborers on estates. The implications of this labor arrangement are far reaching. In both St. Lucia and Dominica the phrase "coup de main" still refers to exchange labor arrangements, called on by farmers during periods of intense labor such as land preparation or weeding. ✓

Emancipation in 1834 signaled a shift from slavery to peasantry that deserves exploration. For the purpose of this exploration slavery is considered to have ended after the four-year period of apprenticeship. Unlike populations in other developing nations, *peasants* in St. Lucia and Dominica have long operated within local, regional, and trans-continental market economies. In fact, ancestors of present day farmers in St. Lucia and Dominica arrived after the first European colonizers. Therefore their arrival and growth occurred after "the region was fully incorporated within the modern world economy" (Trouillot, 1988, p. 21). Nor were their ancestors blessed with indigenous knowledge and generations of experience on the land; other than maize, manioc and sweet potatoes, "they depended principally upon plants and animals brought into the region" by Europeans (Trouillot, 1988, p. 21).

There was certainly a transition period when newly freed slaves in both countries developed survival strategies. Some continued working on estates as wage laborers while producing their own food on the margins of the estate. Others left the estates

completely and while rarely able to establish large-scale production of the dominant cash crop, produced and marketed other financially viable crops such as provisions—cassava (*Manihot esculenta*), yams (*Dioscorea*), breadfruit (*Artocarpus altilis*), sweet potatoes, and plantains—and cash crops like cocoa, cotton (*Gossypium spp.*), indigo (*Indigofera hirsute*), ginger (*Zingiber officinale*) or nutmeg (*Myristica fragrans*).

Production and especially marketing of non-dominant crops soon became the domain of women in Eastern Caribbean. Owing to their historical roles in production, women in the region were never far removed from the economic aspects of agriculture. There was no neat dividing line between their public and private sphere activities (Besson, 1993; Momsen, 1993; Ho, 1999). Women were not relegated to household subsistence production activities but were economically active producers and marketers. While not suggesting that peasant farmers in St. Lucia and Dominica ever marketed everything they grew, they have always operated in close proximity to production systems that put a premium on particular crops for export. Peasants in St. Lucia and Dominica always knew that by producing these crops they could generate income. ✓

Because sugar remained the dominant crop in St. Lucia from its establishment in the early 1700s until the 1950s, this suggests that while moving off the plantations, peasants continued working on the estates for wages. Large river valleys suited its agronomic needs as well as the waterpower crucial to processing. Former slaves, their children, grandchildren and subsequent generations settled in the growing cities, on the slopes above the estates, and on unoccupied Crown Land deeper in the interior. There they produced crops such as plantains, dasheen (*Colocasia esculenta*), tannia, sweet

potatoes, mangoes (*Mangifera indica*), breadfruit, yams and bananas both for market and home consumption. They cultivated peanuts (*Arachis hypogaea*), rice (*Oryza sativa*), citrus (*Citrus aurantifolia, sinensis, and paradise*), and pineapples (*Ananas comosus*) for sale in city markets and for export to other islands. Women became the main conduits from field to market. Women's economic roles included producing as own account farmers or wage laborers, selling in local markets, buying produce at the farm gate and selling it to wholesalers for export, and exporting to other islands in the region. ✓

While St. Lucia's crop of reliance on sugar persisted for nearly 250 years, the situation in Dominica was quite different. As indicated by the coffee/sugar overlap from the mid 1700s until the mid and late 1800s respectively, neither Dominica's estate owners nor its peasants enjoyed long periods of economic stability. The decline of sugar production in Dominica after 1860 was contrasted by the rise in limes as the new commodity of choice for both growers and buyers.

Lime production and exports from Dominica began in earnest in the 1860s and within a decade, lime-producing estates were making more money than sugar producers. Available land was planted in limes in hopes the market would last another six or eight years until the trees bore fruit, and it did. By the 1890s, lime was the dominant crop in Dominica and Dominica became the world's largest producer of limes. Limes had several advantages over other crops: (1) the trees grew on most island soils; (2) large tracks of flat land were not necessary; (3) farmers could plant few trees and still recognize a profit; and (4) it could be sold raw, as concentrated juice, as essential oil, pickled, as whole fruit, or as citric acid. For eighty years, lime production

and processing dominated Dominican agriculture playing a role no previous commodity had and it allowed peasant farmers to participate in significant production of the dominant crop for export. The run had to end and did in an unfortunate combination of prohibition in the U.S. followed by several hurricanes and finally a fast spreading lime blight that killed the industry on the island. ✓

The economy of Dominica had once again depended on a single export crop. However, unlike past declines in coffee and sugar, this failure affected small farmers as well as estate owners. Writing in 1935, fifteen years before the collapse of the industry, Harrison claimed, "So completely was the financial welfare of Dominica tied up with the conditions in the lime industry, a warning was given in 1915 that what had happened in the coffee and sugar industries might happen in the lime industry. Growers were urged to do more mixed cropping, lest Dominica again experience an exodus of discouraged capital and planters, and another period of depression ensue from which recovery might be slow and uncertain" (1935, p. 72). He suggested that in addition to limes, farmers should diversify more evenly into oranges, coffee, cacao, coconut, bay, and fruits and vegetables for export to northern latitudes. His final point echoes the present day situation when he claimed "The prosperity of Dominica, however, rests not upon its Caribbean trade, but hinges upon extending existing markets in the United Kingdom and the United States of America, and upon the development of new markets in Canada" (Harrison, 1935, p. 75).

It is worth noting that although lime production and processing supported the Dominican economy for more than half a century, it was far from the island's sole agricultural activity. According to Harrison, "Very few estates now rely on a single

cash crop, and the peasantry are growing a wide diversity of exportable crops, in addition to food crops for local consumption, on one and the same area” (Harrison, 1935, p. 75). This reflects a change in the role of monocrops with the abolition of slavery. While plantation owners remained profit driven, their former slaves were survival driven leading them to pursue food security and economic viability at the same time. In addition to producing staple foods for themselves and expanding urban populations, they cultivated other crops for export including coconuts, copra, citrus and spices.

Peasant livelihoods in St. Lucia and Dominica have sought to balance satisfying household consumption needs with food and cash income. Farmers there have never been purely subsistence producers separate from markets. The challenge is the balance, and their ever-increasing reliance on a dominant export crop subjected them to the same hazards as estate owners.

Bananas

The worldwide economic downturn of the 1930s brought about the last large shift in Eastern Caribbean monocrop production. Sugar production in St. Lucia and lime production in Dominica dwindled as disease and hurricanes significantly damaged crops while war threatened access to European markets already reduced by the depression. By the early 1930s, British planners and colonial administrators searched for another crop suitable for production in the islands. The British sought a specific crop that “(1) could be produced by independent yeomen, renters, or sharecroppers using the peasant labor process; (2) could be integrated in the overall colonial fruit scheme proposed by the Imperial Committee; (3) required little capital; and (4) required

little time from planting to harvest” (Trouillot, 1988, p. 126). Bananas met those criteria.

Despite the early reluctance of many officials in Britain and the Caribbean, bananas were to become the product through which capitalism fully integrated and dominated the peasant labor process. The combination of (1) suitability to local environments; (2) agronomic characteristics of the crop; (3) a long history of peasant cultivation on their grounds; and (4) the edibility of the product, contributed to its rise as an export commodity. By the time serious banana exports began in the early twentieth century, St. Lucians and Dominicans had been cultivating them for nearly 200 years.

The shift to banana cultivation for export had interesting ramifications for peasant producers. Banana production and consumption had long been part of their household livelihood activities. Production for profit “meant that the cultivation of the crop did not imply a split between commercially oriented production and production geared to the maintenance of the household. Rather, that cultivation remarkably brought together the divergent aspects of the peasant family: its role as a unit of production and as a unit of consumption. (Trouillot, 1988, p. 135). As previously mentioned, women had long been producing crops—including bananas—for home and market, without distinguishing between the two spheres. Familiarity with bananas allowed farmers to turn them into a cash crop with little delay. Peasant farmers now participated in the export economy in ways they never had and enjoyed the resulting increase in economic well-being. Bananas could be profitably grown on small parcels in a short amount of time whereas limes required six to eight years between planting and maturity and sugar

production required space and water resources for production and processing (Dujon, 1997; Harrison, 1935; Trouillot, 1988).

Bananas could be grown on plots already controlled by small farmers, they could be consumed in the household, they bore fruit within nine months, and could be sold in the same condition and on the same day they were picked. Growers did have to arrange transport of the fruit from the field to collection points, but were able to coordinate this with their neighbors. Once at the port, the fruit was bought, packed, and shipped out. Farmers had to produce it, pick it and transport it to the docks while quality control, shipping, and marketing were all arranged. In little time, the banana industry was up and running, and highly regulated by nationally supported growers' associations, national governments and TNCs.

As the industry expanded, it became clear that growers were getting the short end of the stick. Prices were set elsewhere, and were non-negotiable. Farmers had two short-term choices, either sell to the representatives of the TNCs or keep their bananas for themselves, or the longer-term option of leaving banana production altogether. Yet no alternatives offered the fortnightly paycheck, technical advice, access to credit, crop insurance and production inputs that came along with the banana scheme promoted by the growers associations and local governments, and backed by TNCs. For the most part, growers produced bananas, invested their profits in land, homes and families, and became consumers at levels never before seen in St. Lucia and Dominica.

If, as already suggested, banana production changed farmers' position vis-à-vis capitalism, it did not benefit all farmers equally. In particular, banana production made women's position worse than previous crops had. Before commoditization,

'provisions' such as dasheen, sweet potatoes, plantains and bananas were seen as women's crops because they had long controlled production and marketing for home consumption and sale (Grossman, 2000, 1998). Sufficient provisions were produced for home consumption, trade with family members, sale at markets or to hucksters (most of whom were women) who sold them in local markets or exported them to other islands. In any case, women as heads of household or in cohabitating unions had considerable input into the timing and volume of those sales and control of that income (Grossman, 1993). Their control of their produce "was due in part to the then lesser value of cash exchanges and in part to many villagers' views that provisions were "female" crops; women had the power of decision vis-à-vis the products and were not excluded on the basis of gender from any step of the work process that led to those products" (Trouillot, 1988, p. 258).

The rise of bananas signaled a decline in women's standing by (1) marginalizing the role of provision production in household livelihood strategies and (2) reducing their access to wage labor in sugar and lime production and processing. Although the nature of women's roles did not change drastically, their access to and control of resources—especially land, labor and resulting income—did, and not to their advantage. Women's roles in agriculture and natural resource use in present day St. Lucia and Dominica will be further explored in Chapter 5.

The reliance of St. Lucia and Dominica on a series of dominant crops since settlement by Europeans over three hundred years ago relates to their primary role as colonies, to harvest wealth from the land and export it to Europe. Emancipation in 1834 shifted the mode of production (from slavery to wage labor) but did little to

change reliance on one or two crops for economic survival. Colonialism and the primacy of these crops dictated settlement and natural resource use patterns, whose remnants can be seen today. The next section explores these issues in depth.

Settlement, Land Use and Tenure Patterns

Although belonging to the same geographical group, St. Lucia and Dominica are characterized by distinct patterns of settlement, land use, and tenure. Ecology affected settlement patterns, which in turn structured use patterns. "These differences are partly the result of climatic and topographic characteristics, which dictate choice of crops. No less influential, however, are the socioeconomic factors which, in each case, have resulted in unique and distinctive forms of land settlement and tenure" (Finkel, 1964, p. 168). Earliest European settlers in St. Lucia and Dominica were a mix of pirates, military, colonial administrators, and land speculators. Military claimed strategic plateaus and hills from which they could repel attacks from the sea. Pirates sought undetectable hiding places from which to stage raids. And colonial administrators and land speculators arrived in search of natural resources (land, water, forests, gems, or minerals) on which to support colonies.

The earliest European settlements on both islands were established on the leeward (west) coast where calmer seas and natural harbors made landing possible. From there, speculators sought convenient timber stands for cutting and land appropriate for agricultural use. In St. Lucia they found numerous, wide river valleys seemingly custom made for sugar production and processing. Colonial authorities sold valley land to wealthy Europeans who established estates in river valleys and on contiguous gently sloping terrain. Given the nature of the terrain, early arrivals in St. Lucia were able to establish estates in coastal areas and on some interior plateaus.

In Dominica however, the abundant rivers flowed fast and narrow from peaks over a thousand feet taller than those found in St. Lucia. Following river valleys into the interior typically did not take long, nor get far before the steep slope and thick vegetation discouraged speculators. As a result, the settlement and natural resource use patterns in Dominica began as a ring around the outer edge of the island. Such valleys that did exist in Dominica were claimed, cleared, and commercialized much as they were in St. Lucia. In the 1760s Dominica claimed nearly 500 landowners (over 80% of whom were British with the remainder French), their families, and 6000 slaves (Baker, 1994), even though access to the interior was severely limited.

With the islands changing hands between the French and British, most landowners remained on their property and continued production after swearing an oath of loyalty to the current power. There are indications that the transfer of power was not always peaceful, and that some audiences (namely slaves and the Carib) had a preference for French rule. "From their mountain homes, Caribs and runaway slaves made raids upon the English settlements for plantains, bananas, ground provisions, and stock" (Harrison, 1935, p. 69).

It is worth noting that British land surveys of both islands served as the official estate and municipal land ownership maps. Few conflicts arose from this undertaking, although some certainly did. The most contentious land arrangements involved hundreds of smallholder farmers who left other previously settled islands in search of undeveloped land in both St. Lucia and Dominica. In addition to Europeans, this group included 'coloured' and former slaves emancipated by French owners in Martinique and Guadeloupe. Although limited in number, their impact on the overall land

settlement and tenure schemes in St. Lucia and Dominica are important. Plantation owners held the best agricultural land, namely river valley bottoms and slopes where they produce high value cash crops. The immigrant small holders settled on the ridges on top of slopes above these estates, and further in the interior, producing their own provisions, and such livestock, fruits, vegetables and spices for market as they could. Their production was fairly diversified and was designed to satisfy their own food security needs as well as their need for income.

The initial British settlement schemes of 1763 had unforeseen consequences on natural resource use patterns. Colonial administrators encouraged expatriate Brits from other Caribbean territories to come settle in St. Lucia and Dominica. These immigrants, “schooled in the contemporary techniques of sugar-cane production, dealt a severe blow to the French system of tropical agriculture which relied upon the cultivation of a variety of crops, such as coffee, cocoa, cotton, indigo, spices, and subsistence foods on a single plantation, with sugar-cane playing only a minor role in the agricultural economy (Niddrie, 1966, p. 78). Harrison adds that when the British took control of Dominica, “there were about two hundred French planters on the island, engaged primarily in the raising of coffee, but producing also some sugar, oranges, pineapples, and indigo. In addition to the major exports of coffee, molasses and rum were traded for staves, shingles, lumber, salted fish, horses, cattle, hogs, poultry, flour, rice and tobacco” (Harrison, 1935, p. 68). Hindsight suggests French settlers had a different approach to natural resource use than the British, one seemingly more sensitive to the land. It also suggests that French colonial ambition was different than the British focus on exploitation.

Niddrie's identification of a French system of tropical agriculture should be noted. He implies that while French settlers were clearly producing for export and trade as well as domestic consumption, their agricultural practices contrasted with those of British settlers. His reference to 'contemporary techniques of sugar-cane production' can be interpreted as a focus on producing and processing as much sugar as possible, ultimately at ecological expense. At some point during the late 1700s, the British recognized detrimental environmental effects of haphazard settlement and extraction. A Crown directive to colonial authorities suggested, "Colonists should not be allowed a free rein to exploit their new lands by transplanting haphazard and destructive agricultural techniques, commonly practiced in St. Christopher, Barbados, Jamaica and New England. These included rapid deforestation and soil exhaustion, together with chaotic land boundaries" (Niddrie, 1966, p. 67). However, rather than addressing destructive land use techniques, the Crown simply allocated smaller parcel sizes than previously granted in other islands, likely making the situation even worse.

The abolition of slavery in 1834 changed settlement, land use, and labor arrangements in St. Lucia and Dominica. Large numbers of former slaves walked off the plantations and up into the hills where they found smallholder settlers firmly entrenched. While conflicts over land certainly erupted between these groups, former slaves settled mainly in the areas between existing estates and ridgeline smallholder settlements. Others squatted on abandoned estates or Crown land, more plentiful in Dominica than St. Lucia. Former slaves who remained as wage laborers on estates frequently established private plots, often trekking into the interior and claiming uncultivated tracks of land for their use.

In St. Lucia, the abolition of slavery signaled the decline of the labor-intensive sugar industry. Indentured laborers were brought from India—beginning in the 1880s—to alleviate chronic labor shortages on estates but the supply was insufficient to sustain the industry. By this point in history, the population of St. Lucia (roughly 35,000) was nearly double that of Dominica (less than 20,000) (Trouillot, 1988). A combination of more land suitable for sugar production, and less harsh terrain sped the development of St. Lucia in comparison to Dominica. Greater sugar production had given St. Lucia more money, mechanization, and trade, while less hostile terrain facilitated settlement of interior parts of the island. The island had a relatively stable economic base and access to land for new settlement.

In comparison, Dominica “never had the large sugar plantations that fed off slavery and made fortunes for European colonists elsewhere in the region” (Jones, 1999). The island gave refuge not just to the Caribs, who resisted colonization longer than anyone else, but to fugitive slaves and indeed to fugitives of all kinds, including loyalists fleeing the American Revolutionary War. “After abolition, former slaves simply walked off such estates as existed to clear the largest area that could be cultivated by a single family—four, or five acres, perhaps—and start subsistence farming on the fertile mountain slopes” (Baker, 1994, p. 42). His assertion that former slaves became subsistence farmers is suspect but possible in periods of transition.

Throughout the British Caribbean the emancipated labor force demanded significant changes in social and economic structures from colonial administrators during the latter half of the 19th century. Slavery had ended but little attention had been given to creating or improving infrastructure, strengthening local institutions, or

laying the foundation for a free society. Demands for greater investment and attention to conditions in the colonies met with government foot dragging or outright resistance. Colonial administrators focused on creating prosperous economies, not functioning societies. They exercised control by limiting economic options for former slaves. Government restriction of access to land for private production forced former slaves to continue laboring on estates. The crown did not want territories of smallholder, ex-slaves who controlled the means of production (land and labor); they wanted territories of productive estates fueled by former slaves.

By the 1890s, with sugar and coffee markets in constant flux, British colonial officials sought increased economic stability in the islands. This departure from monocrop exports made use of ever-increasing peasant populations to diversify commercial production. Until this point most agricultural activities in St. Lucia and Dominica (e.g., sugar, coffee, cacao, and livestock) had been imported from Europe and other tropical territories. Although farmers had likely experimented with production and processing techniques, there was no infrastructure for research and dissemination of these ideas.

In the early 1900s, the Crown addressed this need by establishing 'botanical gardens' as nursery and distribution centers for commercial fruit species designed for export (Trouillot, 1988). This step indicated a change in status for smallholder producers in St. Lucia and Dominica. It implied a psychological shift from laborers to own account producers and decision makers. Within ten years, a newly established Dominican Agricultural College began training growers in new techniques. By 1926, the governments of St. Lucia and Dominica systematically promoted fruit (including

mango, grapefruit, oranges, and pineapple) cultivation and export to Britain and the United States, based upon peasant (small scale) cultivation (Trouillot, 1988). Thus the early twentieth century gave birth to bureaucracies that quickly became major stakeholders linking public and private sector interests.

By the early twentieth century the agricultural sector consisted of a combination of estates—with remnants of sugar in St. Lucia and limes in Dominica—and smallholder production. The islands were more or less self sufficient in food production and exporting food to Europe, the United States and other islands in the Caribbean. Having invested in the advancement of the agricultural sector, colonial administrators had to face the fact that limited space, limited resources and limited experience left the vast majority of growers reliant on government facilitated markets for part of their survival. This population had never been subsistence farmers; they had survived by balancing production for consumption and commerce.

Land Tenure

Remnants of European political, economic, legal and educational systems persist in the Eastern Caribbean. This section focuses on post-slavery land tenure, an important element of the gendered political ecologies of St. Lucia and Dominica. Land tenure in the Eastern Caribbean is an often-cited cause or companion of a struggling agricultural sector (Baker, 1994; Dujon, 1997, Finkel, 1964; Roseboom, Cremers, & Lauckner, 2001). In particular, the issue of family land, versus either freehold or leasehold, remains a frequent point of contention in literature and in reality.

Europeans took control of land in St. Lucia and Dominica upon colonization and sought to maintain it through legal means after emancipation. Although no longer based on slave labor, the colonies remained economic entities in service of the Crown,

continuing the need to control the land. Colonial authorities could not afford their labor force to have any sort of autonomy, which might lead to siphoning off profits. They still harbored dreams of European satellites, populated by Europeans, and available land was their biggest draw.

Family land in the Caribbean evolved after the abolition of slavery, emerging as a strategy for land acquisition by former slaves. Plantation owners and colonial officials had a vested interest in keeping their laborers laboring on plantations and not on their own property. While not making it illegal for them to own land, officials made it almost impossible for most ex-slaves to acquire land and become independent cultivators. Land prices were purposefully set out of reach of most ex-slaves, and a minimum acreage per purchase was established (usually around 40 acres in St. Lucia and Dominica). Money alone did not guarantee land availability and “only private lands held by those either willing to sell or forced to do so by economic circumstances, were generally available to the newly emancipated” (Honychurch, 2001).

In response, kin groups of former slaves pooled their resources in order to afford the minimum number of acres mandated by colonial authorities. Although originally deeded to a single purchaser, such plots “granted tenure claim to all succeeding generations whose lineage could be traced to the original owners” (Dujon, 1997, p. 1531). Finkel attributes this system to the French Communal Property Program. “By this system there is compulsory joint ownership by the husband and wife of all property acquired after marriage, but not inherited from one side or the other” (1964, p. 171). Claims to the land are based on lineage to the original purchasers of the land, and are not restricted by gender or, in most cases, the legitimacy of the children (Dujon, 1997).

Family land ensures that each family member has an equal right to cultivate or otherwise occupy a portion of the parcel. Non-residency does not forfeit any decedent's right to return at any time and make use of the land, and in order to sell any parcel, the entire list of heirs must agree. When any descendant dies, their children claim their share of the land, and so on, likely increasing the number each generation. While enabling ex-slaves and their families to legally attain land, this system has left its mark on agriculture in St. Lucia and Dominica over the past hundred and fifty years

Family land emerged as a viable strategy for land acquisition by former slaves in the Eastern Caribbean. At inception, it ensured food security to family members, most of whom depended on what they could grow and scarce wages from estate labor. Family land was a logical reaction to the economic situation at the time, given that few family members could afford to hire labor and relied mainly on other family members and neighbors to help clear and cultivate parcels. Communal work on family land kept communities and families connected and often gave ex-slaves and their descendants their first legal claim to land. Family land gave secure tenure to members who emigrated from the island or sought work elsewhere, ensuring them of rights and access to land upon their return. Family land remains a fixture in the social, economic and agricultural realms of St. Lucia and Dominica, over one hundred and fifty years after inception. It is an integral part of production strategies and continues to support rural communities and economies.

Table 4-1. Dominant Land Tenure Types in Dominica and St. Lucia in 1995

Country	Freehold Land	Family Land	Other: Rent, Lease, Squatted
Dominica	65% of total agricultural acreage (34,000 acres)	17% (5,700 acres plus 3,100 acres in Carib Reserve)	18%
St. Lucia	30% of agricultural parcels (4701 parcels)	46% (7004 parcels)	24%

Source: Department of Agriculture, Dominica, (1995); Planning and Statistics Unit, Ministry of Agriculture, Lands, Fisheries and Forests, St. Lucia (1995).

The persistence of family land has been blamed for underdevelopment of the agricultural sector in the Caribbean (Dujon, 1997; Department of Agriculture, St. Lucia, 1995; Finkel, 1964). Family land tenure dissuades farmers from bearing the cost of improving land that any relative has claim to. Farmers fear that improving parcels will attract long-disappeared family members who will return in time to reap the benefits. Family land is rarely accepted as collateral for securing loans because banks could not foreclose without contacting each and every heir. This type of tenure encourages farmers to grow short-term crops that carry less risk of having to share yields with relatives who appear at harvest time (Baker, 1994; Dujon, 1997; Finkel, 1964). Family land is not a particularly efficient tenure system by today's profit maximizing standards—however, it was never meant to be.

Instituting land reform in the 1960s, the government of Dominica facilitated converting family land to private ownership, and opened abandoned estate lands and select Crown lands to purchase by small holders. As a result, most farmers produce on small parcels of land that they own or rent, not land they hold in common with family members. The largest concentration of remaining family land on the island is the 3,100-acre Carib Reserve whose council has sought other arrangements for farmers

seeking credit. Other segments of family land are scattered in the heights between former estates and are cultivated as provision grounds (mainly root crops such as dasheen, tannia, and plantains for home consumption) and the production of high value cash crops. A combination of low population growth, out migration, and availability of previously closed estate lands has relieved pressure on land in Dominica. This is not to suggest that there are lands simply waiting to be cultivated, rather that relative to St. Lucia, farmers in Dominica have greater access to land. In fact, Dominica has the largest percentage of landowners per capita of any Caribbean island. This has enabled the island to withstand periods of economic and political stress, which would not be possible among a relatively landless wage-earning society (Honychurch, 2001).

Land reform in St. Lucia in the last fifty years has redistributed limited quantities of former estate and crown land while failing to reform family land. Due to a number of factors, St. Lucia had less area in abandoned estate land or unused Crown land for transfer to small holders. Sugar plantations operated well into the 1950s, and were converted directly to banana production with little or no land being abandoned. Higher population, larger estates, and better access to the interior of St. Lucia led to frequent squatting of crown lands by smallholders seeking land. With their options limited and communal land comprising at least a third of all productive land, the government targeted family land for privatization in 1986 claiming, "its under capitalization and low productivity could be corrected by establishing an efficient land market" (Dujon, 1997, p. 1529).

A USAID report suggested in the early 1990s that agricultural income in St. Lucia was decreasing because inefficient allocation and use of natural resources

repressed productivity. The government adopted a program designed to clarify and privatize land titles assuming that this was the major barrier to increasing efficiency and productivity of agriculture. They failed to recognize that St. Lucian farmers utilizing family land did not necessarily share their perception of efficiency and productivity.

Dujon argued that,

The puzzle of rational farmers resisting participation in a program that is presumably to their benefit prompts a reconsideration of the role that multiple tenure patterns might play within an internationalized economy, particularly in light of the impending crisis in the cash crop sector to which farmers' incomes are directly linked, and a reconsideration of some of the tenets underlying structural adjustment policies. (1997, p. 1529)

This exploration of settlement, land use, and communal tenure in St. Lucia and Dominica has presented historical, socioeconomic and ecological differences and similarities as the terrain on which these nations grew. The next section is devoted to the last sixty years of political development in these two countries, culminating in the banana wars that triggered the need for participatory development projects.

Nationalism, TNCs and Banana Wars

Present day situations in St. Lucia and Dominica are closely associated with the political ecologies presented earlier in this chapter. However, the last fifty years have seen dramatic political shifts that turned plantation economies into intricate webs of global connectivity with smallholders marginalized. This section briefly covers the rise of nationalist movements in the Caribbean, shifts in British policies following World War II, the emergence of multi-national corporations and TNCs as power brokers, and the response by the FAO that led to the creation of the study projects in St. Lucia and Dominica.

Nationalism emerged in the Caribbean well before World War II weakened Britain. Dominica, and St. Lucia to a lesser degree, were largely neglected by the Crown through the first half of the twentieth century. Having fueled the industrial revolution in Britain, Caribbean colonies remained attached to their colonizers, but sought increased support for infrastructure, education, representation and participation in decision making. Conflict and clashes between government forces and the descendents of former slaves and peasant settlers increased in number and severity across the region. Conditions worsened during the global depression of the 1930s.

In 1938, a British commission visited the Caribbean to assess the situation and explore options for restructuring the relationship between colonizer and colonies by integrating the latter more firmly into the present economy. The Moyne Commission Report (written in 1938 but held for distribution until 1945) admitted that British policy in the Caribbean had failed and caused serious underdevelopment. As quoted in Honychurch (2001), the report admitted "Of all of the British West Indian islands, Dominica presents the most striking contrast between the great poverty of a large proportion of the population, particularly in Roseau, the capital, and the beauty and fertility of the island." The report called for redistribution of land to increase peasant holdings, improved housing, better communications, and the construction of roads—particularly one across the island.

In 1940 Britain passed the Commonwealth Development and Welfare Act declaring, "The aim of its colonial policy was to protect and advance the interests of the inhabitants of the colonies" (Palmer, 1987, p. 442). This act funneled subsidies to British territories in the Caribbean and recognized the Crown's responsibility to the

West Indies. Granting increased autonomy coincided with Britain's recognition of these territories had gone from assets to economic liabilities.

World War II set the stage for the future of Caribbean territories in two ways, (1) by ruling out the United States as a possible savior, and (2) by weakening the economy of Britain. Already reacting to colonial rule by the 1930s, Caribbean nationalist leaders had thought that the United States represented a viable replacement for British rule. They perceived Americans as being less racist and less imperialist than the British with whom they were very familiar. Local politicians looked forward to freedom and democracy under the Americans and residents looked forward to certain economic gain.

The first disappointment for Caribbean leaders was their exclusion from negotiations that allowed the U. S. to establish bases in the region during World War II. The arrangement was made between the U.S. and Britain and allowed the former to build bases in the Caribbean in exchange for destroyers given to England. "What the West Indians did not understand was that the democratic rhetoric did not, as yet, apply to colonial peoples. No one paid much attention to the objections mouthed by black Caribbean nationalists" (Palmer, 1987, p. 444).

Hope for a U.S./Caribbean alliance ended with the arrival of U.S. troops during World War II. The American military treated their tenure in the Caribbean more like occupiers than allies despite having been warned in advance by West Indians living in the U.S. Islanders were treated badly, housing for American troops was segregated by race, and the anticipated economic gains for locals did not materialize. Afro-Caribbeans were forcibly excluded from beaches and clubs frequented by U. S.

servicemen. The wages offered to civilians by the military hardly made it worth leaving their current positions.

Violence was not uncommon, with assault and murder committed by both sides. Islanders were tried and punished locally while soldiers went largely unpunished. Caribbean officials found the Americans as imperialistic as the British. Pro-American feelings were “replaced instead, by an aggressive nationalism which called for self-government for the islands as an entity” (Palmer, 1987, p. 441). Nationalist sentiment was based on race consciousness and the need for internal self-government. “The whole idea of Empire lost some of its legitimacy, and white British as well as white Americans were no longer thought to be necessary elements in a government” (Palmer, 1987, p. 449).

Movements toward independence picked up considerable momentum after World War II. Local leaders sought out counterparts on other islands in an effort to promote regional cooperation. Regional leaders believed that their bargaining position with Britain would be stronger if they acted as a group rather than individually. Britain agreed and tried facilitating cooperative agreements such as the British West Indies Federation in 1958. An indicator of things to come was the departure from the union of the two largest territories in the federation, Jamaica, and Trinidad and Tobago in 1960. Within two years, both had gained complete independence. This left the smaller territories of St. Lucia, Dominica, St. Vincent, and Grenada on their own in search of ways to maximize their negotiating power.

Despite obvious similarities, each territory had distinct interests and positions they wanted addressed. One of the greatest obstacles to regional cooperation was the

relative size of the members. Smaller territories would benefit from association with territories like Jamaica who feared their main role would be to foot the bill for the smaller, poorer territories. Efforts at regional unity continued during the 1960s and culminated in the establishment of the Caribbean Free Trade Association (CARIFTA) in 1968. CARIFTA was succeeded by the Caribbean Community and Common Market (CARICOM) in 1973 (Roseboom, Cremers, and Lauckner, 2001). While regional marketing and banking bodies were established, it seemed as though every territory was on their own in pursuit of political representation. “Despite the frictions induced by negotiations for independence, substantial regional integration of the nation-states of the English-speaking Caribbean was achieved during the late 1960s and early 1970s” (Will, 1991, p. 3). By the early 1950s, residents of St. Lucia and Dominica had the right to vote. They were each granted self-governing authority in the late 1960s and became independent nations in the late 1970s.

While political instability, economic uncertainty, and independence movements swirled around their islands in the post World War II era, smallholder farmers kept producing. The 1950s signaled major change within the agricultural sector in the Caribbean. Britain was rebuilding and could not afford to invest resources in former colonies. Sugar disappeared from St. Lucia, limes disappeared from Dominica, and land reform enabled previously landless smallholders to acquire parcels for commercial scale production of the next new crop, bananas.

Backed by the rise of the banana industry, a new generation of small farmers began securing an economic base enabling them to build better houses and educate their children. They belonged to newly established national and regional banana grower

associations who mediated their relationship with the sole buyer and exporters of bananas. They received inputs and credit from their associations and a paycheck every two weeks. They hired local labor to help plant and harvest their bananas and paid to get them to the port. They rode out hurricanes, labor shortages, and market fluctuations.

Banana growers in St. Lucia and Dominica profited from a relatively stable banana market from the 1950s through the early 1990s. Banana production did for these islands in fifty years what the British did not do for over two hundred years. Literacy rates climbed to some of the highest in the hemisphere. Access to health care increased. Piped water and electricity were available to all urban and most rural residents. This development was undertaken with a combination of U. S., British and multi-lateral funds, and other government sectors used agricultural money to fund programs and services.

In the late 1950s, the governments of St. Lucia and Dominica gave a European firm, Geest, monopolistic rights to banana production therein. Geest purchased land in both countries and established banana plantations to get the ball rolling and serve as models for local farmers. Geest set regional fortnightly, monthly and seasonal quotas, and terms of transaction thereby transferring virtually all risk and responsibilities from themselves to growers associations and growers. The St. Lucia Banana Growers Association, the Dominica Banana Marketing Corporation and their predecessors facilitated Geest's monopoly. Growers associations in St. Lucia, Dominica, Grenada, and St. Vincent were thinly veiled parastatal agencies (Grossman, 1998). While not official divisions of the national governments, growers associations contributed enough

money to government coffers, officials, political parties, and ministries to earn their unfailing support.

Growers associations (1) scheduled production; (2) notified growers of grade and quantity of fruit to be accepted at the weigh bridge for the next harvest day; (3) paid growers; (4) extended credit against future production; (5) supplied inputs; and (6) supported extension services giving farmers technical advice. The arrangement was structured such that growers did not sell their bananas as much as they were paid for their labor. Although they controlled their land and made production decisions, their relationship to the market resembled that of a wage laborer. If growers wanted to sell their bananas, they sold them to Geest. If farmers were dissatisfied with the prices they were offered, they could leave their bananas in the field to rot. Growers were free to enter or leave banana production or change the size of their holdings, as they wished. But in an all too familiar bind, no other crop offered the security of bananas.

Trouillot suggested the legal agreement between Geest and growers associations “reveals that within the structural boundaries set for the transactions, neither the peasants nor [growers associations] have any control over the volume of bananas they deliver” (1988, p. 146). Growers associations had no leverage with Geest and their regional monopoly. If a particular association threatened to withhold produce, Geest would simply make up the shortfall from another island. Growers associations handled all communication with farmers; conditions were set by Geest and passed on to farmers through their own growers associations.

The Windward Islands became known as banana islands. The highly regulated industry fit existing resources well enough to sustain national economies. The industry

brought far more smallholders into contact with export markets than any other commodity. The credit structure of the industry did not discriminate between farmers who owned, rented, or cultivated family land. While scales of economy applied, growers could cultivate bananas on less than one acre and still recognize a “profit.” Bananas could be cultivated using family or cooperative labor just as easily as wage labor. Production was not mechanized so poorer farmers used virtually the same production techniques as wealthier growers. From this perspective it is easy to see why bananas became part of the national identity.

Although the dominant export, banana was only one of many crops being cultivated. Historical production patterns persisted and farmers in St. Lucia and Dominica continued cultivating provisions, fruits, vegetables, spices and livestock for home consumption, local sale and export. While none of these commodities enjoyed preferential markets, associated lines of credit or personal technical advisers, support was available. With limited resources, ministries of agriculture focused their efforts on meeting domestic food needs while helping farmers improve their production of non-banana crops. Compared to bananas, these efforts received little attention.

The 1980s were the high point of banana production in the Eastern Caribbean. In the peak year of 1988, 7,000 growers in Dominica exported 72,000 tons of bananas cultivated on 15,000 acres. Bananas represented nearly 20% of the Gross Domestic Product (GDP), 60% of all national exports, and provided jobs for 10,000 people, one out of every seven on the island. In St. Lucia in 1988, over 10,000 banana growers exported more than 133,000 tons of bananas, accounting for 34% of GDP.

Eastern Caribbean countries rode the Geest wave until it came crashing down on them in the early 1990s. Preferential trade agreements between Eastern Caribbean countries and Britain came under scrutiny in 1992 with consolidation of the European Union. At virtually the same time, the same trade agreements were the subject of a complaint lodged with the World Trade Organization (WTO) on behalf of Latin American banana producers. As the global arbiter of trade disputes, WTO examined favorable market arrangements between Britain and banana producing former colonies. It is worth noting that in this case, 'favorable' market arrangements signified a system favorable to Geest and not producers or consumers. Table 4-2 shows levels of banana production in several Eastern Caribbean countries for the 1992 growing season, before the WTO ruling caused significant decreases in production.

Table 4-2. Characteristics of the Windward Islands Banana Industry, 1992

	Dominica	St. Lucia	St. Vincent	Grenada
Population	71,495	138,151	106,499	90,961
Banana Exports Metric Tons	58,025	132,853	77,361	6,300
Banana Exports Value EC\$	82,200	184,900	101,400	7,800
# of Active Growers	6,555	9,500	8,000	600
Banana Acreage	12,000	16,500	12,000	1,200

Source: Grossman (1998, p. 42)

The banana wars began with a lawsuit filed on behalf of American owned TNC Dole. The issue was presented to President Clinton with the suggestion that what was bad for an American company was bad for America. In reality, no bananas produced in the Eastern Caribbean were consumed in the United States, nor were any American farmers producing bananas. Dole's grievance was based on economics: their Latin American grown bananas were produced more cheaply than Caribbean bananas, yet

they were prohibited from competing for the sizeable British market. The United States representative to the WTO filed the suit and the WTO ruled the preferential trade agreements violated existing fair-trade treaties. Existing preferential agreements were nullified and all parties (Geest, various governments, and growers associations) ordered to end the arrangement. The price paid to banana growers in St. Lucia, Dominica, St. Vincent, Grenada, and other Caribbean countries began dropping, while the prices they paid for inputs, food, credit, and services remained the same. Growers immediately felt the pressure.

Geest gave way to Fyffe, Ltd., another multi-national corporation; growers associations vowed to keep the industry afloat, and farmers kept producing bananas even though their incomes were declining. Those who rented land or relied on hired labor were the first affected. Some farmers continued producing bananas even though their yields no longer covered their production expenses. They were allowed to do so by growers associations who continued issuing checks at harvest while giving farmers inputs on credit. As a result, growers associations began operating in debt and encountered difficulty securing inputs for delivery to growers. The close relationship between growers associations and national governments that had filled the coffers of the latter through the seventies and eighties, suddenly deteriorated. Growers associations trusted their governments to assume their debt, but coming on the heels of structural adjustment programs in the 1980s, it was judged to be bad macro-economic policy.

Prices and production continued to decline into the mid 1990s. Farmers had vehicles and property repossessed, and access to credit disappeared for all but a select

few. Wage laborers refused to work for lower wages. Farmers stopped planting new bananas; existing fields were sometimes abandoned mid crop as the cost of harvest could no longer be recouped at the dock. Unemployment rates rose and out-migration increased. By 1998, Dominica exported 28,000 tons of bananas produced by 2,800 growers on 7,000 acres. From 1988 to 1998, fewer than half the growers produced less than half the yield, on less than half the land at less than half the value.

Table 4-3. National economic indicators for 1995

Banana exports contribution to:	Dominica	St. Lucia
% GDP	14.3	12.3
% Total Exports	51.4	46.5
% Agricultural Exports	83	89
% Total Employment	36	30

Source: Oxfam, (1998).

Structural adjustment programs had failed to restructure national economies in St. Lucia and Dominica away from reliance on smallholder agriculture. Industrialization and mechanization were not sufficiently developed to absorb the most inefficient farmers who supposedly would have dropped out of agriculture and into jobs in other sectors. Bureaucratic downsizing had not reduced the welfare role of central governments. Having relied on yet another monocrop, policy makers, development agencies, planners, and practitioners advocated modernizing and diversifying agriculture to save farmers' livelihoods (Baker, 1994; Dujon, 1997; FAO, 1999; St. Lucia Ministry of Agriculture, Lands, Fisheries and Forestry, 1996; Roseboom, Cremers, and Lauckner, 2001).

This approach to the problem was in conflict with the reality of smallholder farmers in St. Lucia and Dominica. They were suddenly operating within a global economy without their usual customary protection, and solutions were few. Obvious

answers, such as exporting local crops to Eastern Caribbean communities within the U.S. were prohibited by laws and trade agreements. Nor could these farmers meet the quality and quantity standards of the tourism industry in their own countries who imported fruits and vegetables from Florida among other foreign suppliers. Regional markets to which they sold in the past (Guadeloupe, Antigua, St. Maarten) refused their boats full of produce at the docks. Affordable crop inputs such as fertilizer and pesticides, once readily available through growers associations, could no longer be imported duty-free and became cost prohibitive. This web of laws, rules, restrictions, and competition posed new challenges to farmers in St. Lucia and Dominica whose distinctive political, economic, cultural and ecological histories formed their perceptions and expectations of their roles within their countries.

Farmers who had never gotten into bananas or who had gotten out earlier feared the threat to their own markets—for provisions, fruit, vegetables, livestock, spices, etc.—by banana growers leaving the industry. There was little talk of the bigger, regional picture or the realization that thousands and thousands of banana growers from other island nations seeking to replace banana production would soon join them. The situation reached crisis proportions in the late 1990s when stakeholders in agriculture realized they had stopped moving forward, and had risked losing the gains of the previous fifty years.

During the latter half of the twentieth century governments in the Caribbean region increased their investments in non-banana agricultural research and extension. They were supported by regional research organizations such as the Caribbean Agricultural Research and Development Institute (CARDI) and institutions like the

University of the West Indies in Jamaica and Trinidad. Their efforts were directed toward non-banana crops and livestock production for export, local sale, and home consumption. Although they provided an important service to farmers in St. Lucia and Dominica, these agencies were under-funded, understaffed, and under-valued in relation to the banana industry funded research and extension services available to banana growers. Whereas banana extension agents went to farms with inputs (fertilizer, herbicides, insecticides, tools and planning materials), MOA extension agents did not have access to these duty free imports to give farmers.

Despite the high degree of reliance on banana production and export, they were far from the only crop produced by farmers in St. Lucia and Dominica. While bananas were a 'constant' within the agricultural mosaic, farmers continued cultivating other crops for consumption, local sale and export; with limited institutional support. Government sponsored agricultural extension agencies continued to support farmers' production ranging from small plots of tannia, dasheen, plantains, and fruit trees, managed and maintained by household labor to large-scale production of high value crops such as poultry, cut flowers and pineapples.

Under staffed, under funded, and with limited access to research, these agencies and their front line officers worked to deliver appropriate technologies, techniques and tools for production of non-banana crops. In contrast to parastatal banana growers associations, members' fees did not fund extension agencies. They did not license growers, offer credit, subsidize inputs, or guarantee markets for produce. As part of the national bureaucracy, extension policy, planning, practice and priorities were set nationally, passed down through the organization and delivered to producers with little

input from farmers themselves. Yet, with the decline of bananas as the mainstay of local agricultural production, these agencies ultimately bore responsibility for keeping farmers in St. Lucia and Dominica viable. When FAO and the EU sought to help stabilize agriculture in the Eastern Caribbean, it leaned heavily on national governments and their outreach arms to bring farmers into the decision making process in an attempt to sustain their livelihoods.

International Response

In a conference report from a 1999 Special Ministerial Conference on Agriculture in Small Island Developing States (SIDS), FAO set out issues and strategies pertaining to sustainable production, intensification and diversification of agriculture (FAO, 1999a). The strategies and recommendations set out in this report framed the development of the study projects in this dissertation. The report suggested that SIDS had limited resources and options for social and economic development, and although heterogeneous, they shared many characteristics. While agriculture had been the foundation of their economies—supporting large populations and generating export earnings—the following “structural problems” hindered efforts at development:

- Small populations resulting in small markets for domestically produced goods,
- Narrow, fragile natural resource bases prone to natural disturbances,
- A small range of products generating foreign exchange, and
- Limited local capital for investment.

FAO’s approach advocated intensification and diversification of agricultural production, which it claimed was hindered by natural and economic factors. These factors included: limited land availability and poor soils that reduced capacity to support intensive crop and livestock production; and difficulty accessing markets. Therefore FAO promoted diversification toward more marketable crops to increase

foreign exchange, maintain their agricultural sectors, increase food security and self-sufficiency, and prevent further unemployment.

The report acknowledged SIDS' dependence on global markets and preferential trade agreements such as the Lome convention through the EU, which covered St. Lucia and Dominica, as well as other African, Caribbean, and Pacific (ACP) countries. These agreements enabled countries such as St. Lucia and Dominica to participate in global markets despite limited populations causing higher production costs, emigration of skilled personnel, limited local private investment, a heavily burdened public sector and a narrow resource base.

The 1999 conference report characterizes the agricultural sector in countries such as St. Lucia and Dominica as

- Populated by risk-averse, traditional smallholder farming systems that practice mixed cropping;
- Few small scale farms with access to credit;
- Fewer large scale, resource-endowed farms with the ability to change enterprises quickly and flood markets.

FAO identified three sources of constraints inhibiting sustainable diversification and intensification of agriculture in SIDS, (1) production related constraints; (2) market related constraints; and (3) institution related constraints. It is the last of these that the study projects were designed to address. FAO suggested that while Ministries of Agriculture and their corresponding research and extension arms were crucial to diversifying agriculture, they were under funded, had few clear priorities, and suffered from weak linkages between farmers, extension, research, and policy makers.

FAO developed projects to address these issues in several Eastern Caribbean countries, to be funded by the EU. The projects sought to strengthen linkages between

extension and farmers by introducing EOs to participatory methods of engaging farmers in needs assessment, problem analysis, and joint problem solving. The first of these 18-month long, multi-component projects was undertaken in Grenada beginning in June 1998. Similar projects followed in St. Lucia in the summer of 2000 and Dominica in the spring of 2002. Additional projects were being prepared for implementation in St. Vincent, and St. Kitts and Nevis. The first component of each project was a PRA conducted by national extension staff, under the supervision of contractors. The PRAs undertaken in St. Lucia and Dominica are analyzed in Chapter 5.

Similarities and Differences

St. Lucia and Dominica have been on parallel paths for hundreds of years. Although similar at first glance, a change of perspective suggests some differences potentially important to this study. While not attempting to present them all here, several deserve mention. In keeping with a political ecology approach, each of these points impacts or is impacted by the others listed so establishing causality is difficult. As such, they are presented as characteristics of each country relevant to the projects in this study. These differences are based mainly on personal observation, discussion with colleagues and literature.

Dominica's more rugged ecological features (1) kept it unsettled, undeveloped, and underdeveloped longer than St. Lucia; (2) prevented intensive sugar production and processing; and (3) left it with few sandy beaches to be converted into tourist dollars. This preservation by default of one of the least spoiled islands in the Caribbean, spawned an eco-tourism industry.

According to 2003 census data, St. Lucia had over 160,000 residents and a 1.25% growth rate. Dominica's 2003 population was just under 70,000 with a -0.6% growth

rate due mainly to out-migration. Increasing population in St. Lucia will increase pressure to convert agricultural land into settlements. As this coincides with a shrinking agricultural population, St. Lucia faces increasing food imports and changing roles for farmers.

However subtle, ethnic differences exist between St. Lucia and Dominica. Over 90% of the population in each country is categorized as black. Whereas indentured servants were brought to St. Lucia from East India, few made it to Dominica. Over 3,000 Carib descendents live in Dominica while none appear in the St. Lucia census. St. Lucia seems to have retained more French influence than Dominica as reflected in place names and the frequency of spoken patois.

Seemingly everyone in Dominica is a farmer, is related to one or is friends with one. City dwellers receive provisions (dasheen, tannia, sweet potatoes, plantains) from rural relatives or friends without cash exchange. Provisions produced in Dominica are consumed by the grower, given to relatives and friends or sold to hucksters who export them to other islands. It is not uncommon to see provisions, free for the taking, sitting by the side of a road around the island. In contrast to vibrant market scenes in St. Lucia, there are two weekly markets in Dominica where few provisions are for sale.

Coinciding with structural adjustment in the mid 1980s, St. Lucia had begun to diversify its economy to include a free trade zone for manufacturing, a small oil refinery, and a burgeoning tourism industry. These 'modernizing' influences coupled with population growth and a scarcity of land for cultivation gave women and men somewhere to work if they left the farm. A generation later, although economic downturns have increased unemployment and decreased government services, few St.

Lucians want to go back to the farm. Farmers, front-line extension officers and MOA personnel frequently mentioned the negative image of farming and farmers in their country. Agriculture seemed to lose public support as the money associated with bananas dried up and consumers exercised their preference for imported goods, including foodstuffs. Farming was perceived as dirty work for poor people who were becoming increasingly distant from the food they consumed.

In comparison to St. Lucia, Dominica seems isolated, insulated, and two decades behind. The enclaves of wealth found in St. Lucia are absent from Dominica as are the all-inclusive resorts, car dealerships, and Kentucky Fried Chicken establishments. The government started an offshore banking industry and a program for foreign nationals to purchase citizenship that are currently being investigated by the United States Department of the Treasury and other foreign governments. A major development project in the Layo River Valley has gone bankrupt at least three times from poor management, embezzlement, and natural disasters. Although Dominicans mentioned that children are not eager to become farmers, many still do. Land is available, and what is grown there is consumed there (although Dominica is a net food importer). Perhaps due to the fact that everyone in Dominica seems to be a farmer or related to one, agriculture is still perceived as a viable profession, and one of interest to most of the people.

Summary

Three distinct themes were used to present the political ecologies of St. Lucia and Dominica in this chapter. The first theme, monocrop agriculture, runs through the history of these countries and encompasses political, economic, cultural and ecological factors. The connection between this theme, the current situation, and its relevance to

the study projects has been established. The second theme, settlement patterns, land use and tenure schemes, is a key dimension of political ecology and examines natural resource use from a slightly different perspective, namely access. Besides playing an important role in the St. Lucia and Dominica histories, this theme is sure to influence the future of agriculture there as well. The final theme—nationalism, TNCs, and the banana wars—together drew the rich and interrelated transformation of these territories into countries currently facing their biggest challenge. This section concluded with FAO's assessment of the agricultural sectors in countries like St. Lucia and Dominica, and likely entry points for project interventions. While the final points presented in this chapter were not woven into the three major themes, they contribute to the overall picture of the study projects. The PRAs undertaken in St. Lucia and Dominica are analyzed in Chapter 5.

CHAPTER 5 STAKEHOLDERS AND PRAs IN ST. LUCIA AND DOMINICA

Chapter 4 traced St. Lucia and Dominica from their settlement as European colonies through their emergence as independent nations whose economies were largely supported by production and export of bananas. By the mid 1990s, a confluence of factors—structural adjustment policies, trade liberalization, and the banana wars—shook the foundation of their national economies. The chapter concluded with FAO's overall assessment of and approach to assisting Small Island Developing States (SIDS), such as St. Lucia and Dominica. When FAO and the EU, an implementing agency and a donor respectively, sought to help stabilize agriculture in the Eastern Caribbean they collaborated with national governments in the region, identifying their outreach arms as mechanisms for bringing farmers into the decision making process in an attempt to secure their livelihoods.

Chapter 4 presented the gendered political ecologies of St. Lucia and Dominica according to the macro-levels of the adapted MERGE framework set out in Chapter 3. This chapter (Chapter 5), uses the micro, or local-level components of that framework to examine stakeholders and project activities, as well as gendered resource use data that emerged from the short-term projects undertaken by the team from UF. Therefore this chapter has three main sections, (1) an introduction to the project plans for the PRAs and the stakeholders involved; (2) project analysis of the PRAs undertaken in each country; and (3) gendered resource use data from the projects.

This chapter examines and analyzes the series of activities undertaken within the PRA in both St. Lucia and Dominica, focusing on how each activity was designed and carried out. The chapter presents the sponsoring agency's goals of the PRA and the specific activities undertaken by the project team as specified by FAO. It then introduces five major stakeholder groups involved in these projects. This is followed by presentation of each PRA; St. Lucia first, followed by Dominica, in terms of activities undertaken, stakeholders involved, and outcomes of each. The analysis of each project is followed by gendered resource use findings from the PRAs in both countries.

Project Plans for Incorporating Participation in Extension Program Planning in St. Lucia and Dominica

FAO is a multi-lateral organization whose main functions are providing (1) development assistance; (2) information and support services for development projects; (3) policy advice to governments; and (4) a neutral forum for international cooperation. These functions include limited project funding, therefore they partner with other organizations and institutions to plan, fund and deliver projects. For this reason, FAO is known as an implementing agency. The EU contributed financially to these projects while each MOA contributed staff, equipment, office space and other resources.

Following the 1999 conference on diversifying and intensifying agriculture in SIDS (FAO, 1999a), FAO prepared a series of project plans with multiple components for addressing perceived institutional weaknesses within ministries of agriculture. Their justification reflected the conference report and suggested that the limited success of agricultural diversification efforts was due to poor infrastructure, inefficient marketing and distribution systems, and ineffective methodologies used by EOs. While putting

responsibility for diversification programs on EOs, FAO admitted that traditional extension strategies had been top-down in nature rather than bottom-up, resulting in a lack of farmer participation in extension program planning.

The projects to strengthen extension delivery in St. Lucia and Dominica were both 18-months long and divided into a series of components (see Appendix B). The 18-month FAO projects began with appointment of local program staff within each MOA in collaboration with a representative from FAO. This was followed by a project planning workshop in each country where the FAO representative, MOA personnel, and EOs began planning for the following 18 months of project activities. *The PRAs followed shortly after the FAO project-planning workshop.* An important objective of the PRAs was to provide base-line data for subsequent FAO project components. These included, (1) selecting and analyzing cost of production for priority crops; (2) training EOs in group extension techniques; (3) training EOs to train farmers in business management and marketing techniques; (4) design of production and marketing data bases; and (5) training EOs in computer use to work with the data bases.

This chapter analyzes the PRA component of each project because that was the extent of the researchers' involvement. The PRA component was designed to: (1) train EOs and MOA personnel in the use of participatory methods; (2) conduct PRA surveys; and (3) provide base-line information for subsequent components, and identify farmers' needs to be incorporated into extension program planning.

The PRAs undertaken in St. Lucia and Dominica were preceded by a similar undertaking in Grenada. Further projects were in preparation for St. Vincent, St. Kitts and Nevis to follow those undertaken in St. Lucia and Dominica. The project in Grenada

was done from June through August of 1998. The purpose of the project was to train MOA staff in “gender-sensitive participatory approaches and methods, and to carry out participatory rural assessments in order to assess how to improve the access of small farmers to extension support” (Eckman, 1998, p. 3). Eckman suggests that project documents identified local EOs as being production oriented; making recommendations that did not always meet the support needs of farmers in Grenada (1998).

The 18-month FAO project plans for St. Lucia and Dominica made similar claims, suggesting that extension services there needed institutional strengthening and improved technology transfer methodologies. Institutional strengthening and improved technology transfer methodologies were to be informed by increased farmer participation. This was expected to provide EOs with reliable data and introduce different approaches to interacting with farmers. The change in relationship between EOs and farmers was expected to ensure that farmers were involved in extension program planning, and could derive a sense of ownership—along with EOs—of the process (FAO, 1999b). According to FAO project documents, each of the 18-month long projects was to be initiated by a three month Participatory Rural Appraisal (PRA) facilitated and led by project teams. *The findings from the PRAs were to serve as the basis for regional extension program planning by MOA personnel and EOs in St. Lucia and Dominica, as well as baseline data for subsequent project components to be carried out in the subsequent fifteen months.*

From this point forward, the term “project” will be used to denote the three-month PRAs undertaken by teams from the University of Florida.¹ The terms “team” and

¹ A team from the University of Florida was contracted by FAO to undertake the PRA in St Lucia based upon its proposal submitted in response to a Request for Proposals (RFP) by FAO. Based upon their performance in St. Lucia, team members were contacted by FAO a year later to conduct a similar project in

“project team” refer specifically to the project team from the University of Florida. FAO stipulated activities to be undertaken by the project team during the PRA in order to meet the following intended outcomes: (1) planning; (2) training; (3) PRA fieldwork; (4) data synthesis and analysis; and (5) final reporting and presentation. FAO left the project team with latitude in designing and delivering training and fieldwork, and synthesizing and presenting results. Although the projects shared rationale, objectives, expected outcomes, and key personnel (namely the FAO representative and members of the project team), the projects were not the same. Some of the differences can be attributed to gendered political ecology factors as identified in Chapter 4, while others will be explored and analyzed in this chapter. In particular, lessons learned in St. Lucia were instrumental in the conceptualization and design of PRA project activities in Dominica.

The FAO project plans for Grenada, St. Lucia, and Dominica were conceptualized and designed in a similar manner as indicated by Eckman’s account of the Grenada project (1998), as well as the similarities in the Terms of Agreement for the other two projects. According the Terms of Agreement, the project team was responsible for training the national staff of EOs on PRA methodologies, and conducting PRAs in each country with the participation of EOs. The PRAs were designated as a means of capturing, articulating, and addressing constraints and opportunities relevant to the socioeconomic advancement of the rural and agricultural sector as a whole. According to FAO documents, the five *intended outcomes* of the PRAs in St. Lucia and Dominica were:

Dominica. The 12-week PRA project in St. Lucia was budgeted for \$40,000. The 10-week PRA project in Dominica was budgeted for \$35,000.

1. *Capturing* the realities of the lives of farmers and their households, especially small-scale, female and resource poor farmers in varying socioeconomic circumstances and engaging them in the analysis of relationships and processes that impact/influence their lives'; by effectively placing them at the center of the information gathering activity.
2. *Distilling* the types of information that are critical to the process of defining the real problems, constraints, needs and opportunities regarding the socioeconomic advancement of especially the rural poor; and deriving self-reliant, participatory approaches by taking into consideration the issues of globalization, trade competitiveness, modernization, resource depletion, poverty, gender inequity and climate change.
3. *Providing* the basis for efficient and effective program planning, implementation, monitoring and evaluation at the field level, through the institutionalization of mechanisms that pay due attention to the local perspective on constraints and opportunities and enmeshes the imperatives of globally-driven economic change, gender equity and environmental sustainability.
4. *Heightening* awareness and understanding of the character of social relations at the household and community levels; occasioned by differentials in degree of control over or access to critical production and marketing resources; and defining the operative power structures at these levels, as well as the avenues for the powerless to access their means of livelihood.
5. *Enabling* the development of mutually reinforcing alliances among farmers and extension agents; through the strengthening of farmer to farmer and farmer-extension agent organizations and partnerships in a manner conducive to the acceleration of the agricultural diversification and rural transformation process, oriented towards the building of sustainable livelihood patterns (FAO, 1999b, 2001).

According to the Terms of Agreement, the project teams were responsible for

1. Collaborating with MOA personnel and EOs to develop work plans for undertaking the PRA, generating synergy regarding methods and procedures, making field reconnaissance visits, reviewing secondary data, and interacting with farmers and community leaders.
2. Planning and conducting a training workshop including: approaches, principles, and techniques of PRA for EOs and MOA personnel; sensitizing EOs to gender factors in agricultural production systems and support requirements; producing detailed designs for an initial PRA field module; and providing a "tentative detailed outline" of information for reports.
3. Carrying out PRA surveys with EOs and other MOA personnel.
4. Analyzing results and outcomes for reports.
5. Presenting findings at a national workshop, drawing strategies and programming guidelines for addressing issues such as gender, demonstration plots, and farmer group formation and function (FAO, 1999b, 2001).

Stakeholders

By definition, stakeholders are individuals or groups with a stake, or interest, in a particular situation and who can affect or be affected by that situation. The PRAs in St. Lucia and Dominica were dominated by five groups of stakeholders: (1) farmers; (2) EOs; (3) other MOA personnel; (4) the project team; and (5) FAO including the sub-regional technical officer and other staff in Barbados and Rome. While thousands of people in both countries had a stake in these projects, this analysis concentrates on the interests, roles, and activities of these five groups of primary actors. In this section, the characteristics attributed to these groups are considered, while their specific interests, expectations, and actions will be articulated in the section on process analysis.

Farmers in St. Lucia and Dominica were obvious stakeholders in the FAO projects. The ultimate goal of the FAO projects was to facilitate increased production, efficiency, and diversification within the agricultural sector by strengthening delivery of extension services to farmers. With the projects designed to affect farmers' livelihoods, they were the intended beneficiaries of improved extension delivery services, to be generated by the EU funded, FAO implemented projects.

FAO expected PRA data from a cross-section of farmers based on their gender, age, socioeconomic status, agro-ecological zones, and scales of production. Farmers in St. Lucia and Dominica were eager for help from their governments, but many were skeptical of yet another project collecting data that might or might not help them. In fact, an attempt at conducting a PRA in St. Lucia prior to the FAO project in 2000 had met with limited success. While this other PRA was referred to in conversation with MOA personnel, little was learned about who had undertaken it, or why the effort had not been

successful. The project team had been warned to expect a certain amount of survey fatigue on the part of farmers due to previous MOA efforts to help them. But farmers' willingness to state their position reflected their reality of being at the end of the line; they felt they had only one direction to turn for assistance—the government. In addition to enhanced communication between farmers and EOs, the PRA projects were designed to change the nature of the relationship between these two groups of stakeholders.

FAO specifically sought to address gender within extension program planning and delivery. Given women's contribution to agriculture in the Caribbean and previous failures to recognize their roles and address their needs, FAO was explicit about the need to identify gender issues within the agricultural sector and address them in agricultural extension in St. Lucia and Dominica. Their focus in this pursuit was recognizing women's roles in livelihood systems during PRAs and including them in formulation of extension responses to their constraints. Combining all contacts during fieldwork in St. Lucia and Dominica, 259 of 899 farmers were women. At nearly 29% of all farmers contacted, this figure is representative of the actual number of female farmers in St. Lucia and Dominica according to FAO (FAOSTAT, 2004).

EOs were key stakeholders in both projects. They had been implicated in the FAO project plans as part of the problem—inefficient delivery of extension services—and therefore, had to be part of the solution. The projects targeted EOs and the methodologies they used to carry out their jobs. As the outreach arm of the MOA, EOs were the link between many farmers and the national government (see Figure 5-1). While simplistic, figure 5-1 indicates a common relationship whereby national level priorities and policies are passed on to MOAs, who then design targets to be met by

farmers through EOs. In this common system, EOs' responsibility is to *transfer* MOA recommended technologies to farmers and *convince* farmers to use them, the conventional top-down extension model.

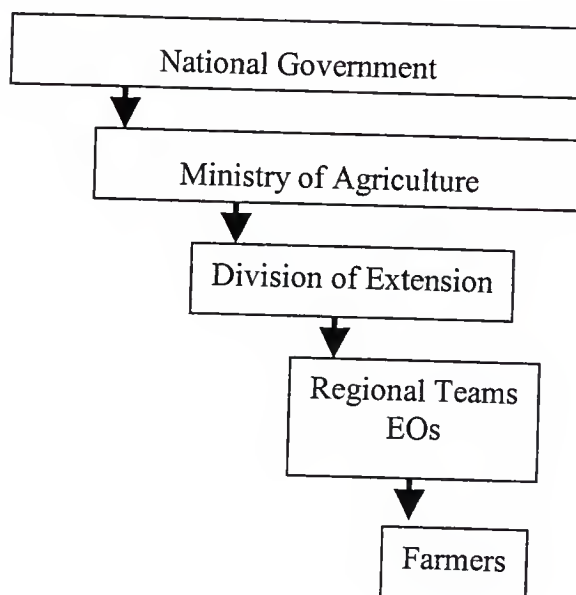


Figure 5-1. Relationship between government and farmers.

In both countries, under the MOA and within the Division of Extension, EOs were formed into *regional teams* according to geographic area of responsibility. Each regional team had one officer who acted as the *regional head or leader*, with responsibility for coordinating that region's extension activities. EOs' roles during the projects included site selection, notifying farmers and community members of the upcoming PRA exercises, scheduling interviews and meetings with farmers, carrying out interviews and focus groups, and collaborating with their colleagues to prepare reports of regional PRA results. Thus, EOs were the assumed key to projects they neither designed nor asked for, a top-down approach. The project plans suggested that EOs could do their jobs better once they began doing them differently (i.e., with more farmer participation).

Of the thirty-four EOs who participated in fieldwork in St. Lucia, eight were women, one of whom was serving as an interim regional head (see Table 5-1). In Dominica, extension 'borrowed' three women from the livestock division for the duration of the PRA. Two of the three women were doctors of veterinary medicine who were attached to the FAO project by their supervisor. These women and a junior technician from their division doubled the number of women participating in fieldwork, from three (including the team leader) to six.

Table 5-1. Staff participating in daily PRA activities by gender

	St. Lucia	Dominica
Male EOs	26	30
Female EOs	8	2
Total EOs	34	32
Female MOA personnel, daily participants	1	3

Implementation of these projects was contingent on the approval and cooperation of the MOA and their personnel in each country. MOA staff members and other resources were being devoted to the PRAs, and their governments had a large stake in the outcomes. The MOAs benefited materially—a vehicle, computer equipment, and training for their staff—as well as from any data collected, and recommendations emerging from the projects. MOAs' interests can be seen as short term (resources and training) and long term (possible solutions to a pressing problem). However, the MOAs were under no obligation to respond to recommendations emerging from the projects.

The MOAs supplied staff, vehicles, office space, supplies, and contacts with farmers and other local stakeholders. This account of MOAs as stakeholders refers mainly to administrators including the Minister of Agriculture, the Permanent Secretary, Director of Agriculture, Chief Agricultural Planning Officer, and Director of Extension. While it is not desirable to group all of these actors together as having the same interests,

their individual roles will emerge later in the analysis. With the exception of the Chief Agricultural Planning Officer in St. Lucia, the remainder of this group of stakeholders in St. Lucia and Dominica were male. From a feminist perspective, this situation indicated that decision-making power belonged to and was exercised by men within the agricultural sectors in St. Lucia and Dominica.

The project teams were stakeholders in these projects, and it is from this perspective that this study has been conducted. The project teams were contracted for their expertise in PRA, which covered planning and overseeing fieldwork, and data synthesis and analysis. Their primary responsibility was designing and delivering a training program that would prepare EOs to undertake countrywide PRAs. Additional responsibilities included capacity building to prepare EOs for reorienting their system from top-down to bottom-up.

The project teams were in a unique position in the projects given their status as experts and outsiders. In combination with their roles as planners, trainers, and researchers, team members facilitated enhanced communication within and between other stakeholder groups. The project teams' interests centered on capacity building for EOs and strengthening their relationships with farmers. The project teams were able to address these needs (as identified in the project plans) largely due to their neutral position vis-à-vis other stakeholders in the projects. In relation to stakeholders within each country, MOA, EOs, and farmers, the project teams were outside of the power structure and somewhat neutral.

The project team served as facilitators, coordinators, problem solvers, analysts, and researchers. By design, they had the most frequent contact with all other stakeholders in

the process. The project team for St. Lucia consisted of a team leader (who was female), field coordinator (this researcher, also female), one permanent team member, and two “interns” who participated at their own expense. The consultant team in Dominica consisted of a team leader (this researcher-female) and one other team member (male) for the duration of the project.

FAO was an obvious stakeholder in the PRAs having designed the project plans and secured funding from the EU. With headquarters in Rome, a regional office in Santiago, Chile and a sub-regional office in Barbados, FAO staff at various levels contributed to and had a stake in the projects. In particular, the sub-regional representative from FAO, based in Barbados, was responsible for project initiation and implementation. He oversaw all national planning in preparation for the projects, secured equipment and other resources, selected project teams, and delineated responsibilities. He worked closely with the project teams and relied on their results for subsequent components of the 18-month long projects including extension program planning, demonstration plots, farmer group formation, and further EO training. His tasks included preparing MOAs and EOs for project activities, monitoring PRA activities, conveying expectations to the project team and EOs, and monitoring data collection and synthesis activities.

PRA in St. Lucia

Planning

The team leader from UF prepared and submitted a proposal for conducting the PRA in St. Lucia, which was accepted by FAO. The project plan from FAO offered targets toward which the project team then directed methods and objectives to meet

outcomes established by FAO. The project team leader had experience with FAO and in the Caribbean,² while the team members had little experience with the organization or in the region. Team members were selected based on field experience with participatory methods and academic training in gender and Farming Systems.

The FAO representative suggested that change could not occur in the agricultural sector in St. Lucia unless farmers were empowered. The existing system was characterized as supply-driven extension that needed to be changed to demand-driven extension, which could be accomplished by empowering farmers and communities. This theme became central to the project teams' actions and objectives during the three-month project. Figure 5-2 illustrates activities undertaken by time period and participant for the three-month project in St. Lucia.

Once UF had been selected as the recipient institution and the project team had been formed, the focus shifted to planning the training program for 35 EOs as stipulated in the Terms of Agreement. "The goal of the PRAs was to expand the capacity of Extension to work with farmers and other stakeholders using participatory approaches." (Spring, Sullivan and Litow, 2000c, p. 1) In an effort to meet this goal, the PRA was designed to "provide the basis for collaboration among researchers, extensionists, and farmers to develop interventions to address technology gaps." (Spring, et al., 2000c, p. 1) Therefore, the guiding strategy of the training program, as presented in the training summary report was to employ participatory methods to empower stakeholders, farmers, communities, and EOs in technology development and dissemination (Sullivan, 2000).

² She had been Chief of the Women in Agriculture and Rural Development Service based at FAO headquarters in Rome.

ACTIVITIES	Pre-Departure January-May 2000	In Country (weeks) May 21-August 18, 2000												Participants
		1	2	3	4	5	6	7	8	9	10	11	12	
Project Proposal Preparation	January 2000													Team leader, Interested grad Students
Training Design, Session Plans	April 2000													Project team
Initial Reconnaissance														Project team FAO rep., MOA EOs
Training Program														Project team, MOA personnel, EOs
Round One Farmer Interviews														Project team, MOA, EOs Farmers
Round Two Focus Groups														Project team, MOA, EOs Farmers
Data Synthesis & Analysis														Project team, MOA, EOs
Presenting Results Wrap up														Project team, MOA, EOs

Figure 5-2. Timeline of activities for PRA in St. Lucia

Upon the project team's arrival in St. Lucia, they began a series of meetings, field visits, and planning sessions with MOA personnel and EOs on project goals and objectives. In addition to familiarizing themselves with the setting of the projects, the project team used this one-week period to refine the training design and session plans based on field observations and input from MOA personnel and the FAO representative. As such, it was the first opportunity for stakeholders to become acquainted with each other and their various expectations, approaches, and interests. The MOA's commitment to a successful PRA was indicated by the resources they devoted to the task, notably the time of the Chief Agricultural Planning Officer.

During planning for training, the project team considered using experiences of EOs for examples during training. Many of their experiences were incorporated into gender, facilitation, interviewing skills, and conflict resolution sessions during the training program. Having been told by the FAO representative that a number of the officers were farmers in their own right, the project team sought to use their experiences as farmers as real life examples for training in tools and techniques. However, the project team learned that EOs who were also farmers had become an ethical issue involving conflict of interest and were instructed not to focus on EOs' roles as farmers.

Training Approach

The team leader and project team conceptualized, designed, and delivered a five-day training program to prepare EOs in St. Lucia to conduct a PRA in each of the eight extension regions. In addition to planning a PRA, the project team considered an overall goal of the FAO project, to increase farmer participation with EOs.

Preparation of a training design, session plans, and establishment of overall training objectives began before the project team departed for St. Lucia. The following objectives were established: by the end of training, EOs would (1) understand why participatory methods are useful for agricultural extension work; (2) have the ability to use participatory tools; (3) be able to use participatory tools in the field; and (4) understand how gender influences production and support systems (Sullivan, 2000).

The project team identified five major topics for training EOs to meet FAO project objectives (1) introduction and definition of participatory methods; (2) rapport building; (3) gender analysis; (4) natural resource mapping and inventories; and (5) Farming Systems analysis (Spring, 2000). While the term Farming Systems was used in the

proposal to FAO, the specific focus was on farmers' livelihood systems. This included all agricultural activities, as well as off-farm activities and sources of income. Having established these five topics as necessary for reorienting the relationship between farmers and EOs in St. Lucia, the project team compiled a list of tools and techniques suitable for exploring each of these themes.

The project team created a training design to generate as much EO participation and input into training as possible. Training was conducted such that EOs left with a 'tool box,' shown in Figure 5-3, from which they could pull appropriate tools to uncover the reality of farmers during fieldwork. Most of the training was spent presenting tools and how to use them in the field. By design, this was followed with hands-on training during fieldwork.

Transects	Farm and Community Mapping
Seasonal Calendars	Gender Disaggregated Labor Calendars
Access/Control/Benefits Matrices	Farm System Modeling
Systems Diagrams	Livelihood Analysis/Diagrams
Stakeholder Analysis	Venn Diagrams
Force field Analysis	Trend and Timelines
Household Composition Diagrams	Wealth Ranking
Project Planning Matrices	Ranking/Priority Matrices
Constraints Analysis/ Matrices	

Figure 5-3. Toolbox delivered during training in St. Lucia. Source: Spring, Sullivan, Litow, and Barham (2000a).

The training design that the project team took to St. Lucia in draft form was finalized in consultation with MOA personnel, namely the Chief Agricultural Planning Officer who collaborated on PRA, and the FAO representative. Items added to the training workshop included sessions on planning for PRA fieldwork, PRA monitoring and evaluation, reporting format for presenting regional PRA outputs, and extension planning in response to outcomes of the PRA.

In an effort to foster EO participation in the process of analyzing farming systems and constraints, the project team decided not to produce a survey or prescribe a set of data collection methods. Instead, they conceptualized and delivered a 'box of tools' from which EOs could choose the most appropriate to the existing situation. In this way, EOs had to assess the situation and could choose appropriate tools for each farmer or type of livelihood system. This approach is basic to conducting PRAs (Chambers, 1997), and resembles the approach taken during PRA training in Grenada (Eckman, 1998).

The PRA training program in St. Lucia was designed as a preliminary step toward strengthening the extension system by changing the nature of the relationship between farmers and EOs. The burden of increasing and incorporating farmer participation in extension program planning and delivery was put squarely on the shoulders of EOs, as FAO had suggested in the project plan. The training program was designed from the perspective that for EOs to change the nature of their relationship with farmers, they needed to understand the situation on the ground, and then reposition farmers as central to the process, rather than being at the receiving end. Therefore, the project team delivered a training program based on concepts of participation and data collection tools for assessing farmer livelihoods, paying particular attention to farmers' constraints and opportunities. In addition to training EOs to elicit these data, a scheme was devised for standardizing and managing these data so that they would emerge from the training workshop and the early days of fieldwork.

After one week in St. Lucia, several issues pertaining to the training workshop had arisen, one of which was the number of people to be trained. The project plan and Terms of Agreement had specified training for up to 35 EOs in participatory methods, leading

the project team to prepare for training 35 people. In reality, the project team and MOA personnel in St. Lucia increased the number of participants and the first day of training began with 55 people. Additional participants in training were MOA personnel and included staff from the Planning and Statistics Unit, various commodity specialists, and other representatives from other MOA divisions. The MOA's interest in re-orienting the agricultural sector was further indicated by greater than expected participation in training, and reflected their desire for maximum exposure to and training in participatory methods.

Training Outcomes

Training design and delivery by the project team were expected to equip EOs with tools necessary for bringing farmers into the extension program planning process. The Terms of Agreement and project plans specified this as a goal. Meeting this goal depended on EOs' understanding farmers' realities, and the project team trained them to do this. The project team and the MOA expected EOs to emerge from training better prepared to understand farmers, with whom they would collaborate to meet farmers' most pressing needs.

The project team hoped for long-term change in the nature of communication between EOs and farmers, changing from a perceived one-way style to two-way communication. This seemed a logical extension of the project plan and FAO's desire to reorient the relationship between EOs and farmers. This expectation was based on the assumption that EOs were interested in changing the nature of the relationship with farmers and vice-versa. Training focused on tools and techniques for achieving this goal in the short-term, during the PRA fieldwork.

FAO, MOA, and the project team emphasized the need to address gender during the PRA training and fieldwork. As such, the project team integrated gender into the training program. An entire day of training emphasized gender tools for use in the field. The challenge, as perceived by the project team, was training EOs to uncover gender issues, contextualize them, and determine appropriate ways to address inequities. The first part of gender training covered introduction and discussion of theoretical concepts of gender, including how gender issues manifest themselves within EOs' daily lives. The remainder of gender training was spent introducing and practicing gender analysis tools including: gender-disaggregated labor calendars and access, control, and benefits matrices. By the end of training, EOs had been introduced to various concepts of gender, their importance in project outcomes, the necessity of recognizing and measuring gender issues and women's participation during fieldwork, and findings specifically related to gender.

The MOA's stake in training was that EOs and other MOA personnel would be equipped to generate an accurate picture of the national agricultural sector, a necessity if it were to be kept viable. They were also interested in a well-trained and responsive staff. Ultimately, sustained change in the relationship and roles of EOs and farmers largely depended on MOA's ability and willingness to respond to farmers' needs once they had been identified.

PRA/Fieldwork Approach

The project team was responsible for coordination and oversight of PRA surveys that they participated in with EOs and other MOA personnel. Data generated during fieldwork were meant to provide a picture of farmers in St. Lucia, their strategies and

struggles. A cross-section of farmers was interviewed within each region, according to target numbers of surveys that had been established during the training workshop. They were grouped by agro-ecological zone, socioeconomic status, gender, age, location and production practices were interviewed within each region, according to target numbers of surveys that had been established during the training workshop.

PRA fieldwork began the day after the end of training according to a schedule established at the workshop. The project team and EOs collaborated to oversee one week of fieldwork in each region until each of the eight extension regions had been surveyed. Regional teams of EOs were responsible for logistics, establishing meeting times and places at the beginning of each day, notifying individual farmers of scheduled visits, and ensuring adequate staffing to send the teams of interviewers into the field (between four and six teams on any given day) to conduct farmer interviews. Field teams ideally consisted of three people, an EO, an MOA member, and a project team member. Given the minority of female EOs and ministry staff, a gender balance was difficult to achieve among the teams.³

Each day of fieldwork began with a meeting of all project staff, EOs, and MOA personnel participating in the day's fieldwork. The meeting was used to review select tools and techniques, and cover daily logistics. Each day of fieldwork ended with all staff reconvening to share and process the day's findings. While tools and techniques for eliciting data had been the focus of training, fieldwork began empirically, building from the ground up and without a set instrument, in classic PRA style. Field teams engaged in

³ By design, the team leader left St. Lucia after selecting the tools, deciding on procedures, completing the training and initiating Round One of the fieldwork. Responsibility for continued implementation rested with the rest of the project team. She returned for data synthesis, analysis, final report writing and the final workshop. This staffing arrangement was stipulated by FAO in the Terms of Agreement.

discussions with farmers around the major themes presented during training. These discussions were designed to increase EOs' overall understanding of the farmers' livelihood system and their specific strategies. This understanding was to include specific information about off-farm and on-farm activities including crops produced, labor and marketing arrangements for each, land under cultivation, land tenure, other sources of income, constraints, opportunities for diversification and gender considerations.

Daily discussions between all field teams about all farmers interviewed produced matrices of livelihood system types and strategies. As such, PRA teams inductively built system types that described the farmers they had interviewed, and began discerning which issues tended to affect which farmers. Rather than surveying farmers to fill in a pre-existing database, information gleaned from farmer interviews was used to build up a database of information deemed relevant to project outcomes by EOs, MOA personnel and the project team.

Sharing information derived from PRA surveys was meant to give regional extension teams control of the data from their region, information they would need to prepare their regional reports that would lead to regional extension program planning. At the end of each day of fieldwork, the project team and regional extension teams had copies of the data generated that day. Daily sharing and processing also served as a means of monitoring PRA surveys in terms of different tools used, and data collected. It also allowed monitoring of to ensure that a cross section of farmers had been interviewed.

As originally conceived, the project team and EOs would conduct the PRA fieldwork in one region per week. The project team and available MOA personnel would

then move on to the next region and repeat the process. However, it was noted that this schedule would put earlier and later regions at a disadvantage. It was reasoned that earlier regions would have longer to meet their target number of interviews after the project team had moved on to the next region, but that their data would be less complete because they had been the first to discern system types. Later regions were concerned that skills developed during training would diminish, as they waited up to seven weeks for fieldwork to begin in their region. There was also concern that if target numbers of farmer interviews were not met during fieldwork in later regions, there would be no time to augment their results before commencing regional data synthesis and analysis.

Hence, the project team and EOs devised a plan that split the PRA surveys into two rounds. Rather than five consecutive days in each region, fieldwork would be done for two days in each region followed by a half day of data sharing and processing, and organizing. Gaps in information would be identified along with regional strategies for filling them. After these two and a half days, the project team would continue to the next region and follow the same process. Following completion of this round in all eight regions, the process would be repeated. This solution was discussed with EOs, MOA staff, the project team, and the FAO representative, all of whom agreed to the proposed change. The team leader presented the rationale for the proposed change to the FAO representative. Round One of the PRAs continued through all eight project regions within the first month after the completion of training. The change in schedule also allowed earlier regions to update their data and later regions to recall tools and techniques from training, as well as ample time to meet their target number of farmer interviews.

While concerns of EOs were mainly how to get the PRA done, the project team considered expanding the scope of the PRA surveys. Round One of fieldwork was progressing with individual farmer interviews and a limited number of focus groups, but community and farmer participation had not yet been expanded. Round One inductively built up data collection, livelihood system types, and monitoring procedures. Large amounts of rich data were being collected from individual farmers, however this was not focused on working toward mutually derived solutions or changing the nature of the relationship between EOs and farmers. While farmers had been positioned to articulate their needs, a mechanism was needed for them to explore them, prioritize them, and work toward community level solutions.

Having already split fieldwork into two rounds, the project team considered how best to expand the scope of farmer and community participation. In fact the original UF proposal to FAO had spelled out that what makes a PRA different from other modes of inquiry including, (1) returning information to the community for modification, correction and analysis and (2) involving communities in their own needs assessment, problem identification and ranking, strategies for implementation, and community action planning. Ability to change course during project implementation is an advantage of PRA over more traditional surveys and questionnaires.

The project team decided that a feasible way to accomplish these goals was to use focus group meetings in each region, and to return information to farmers for verification, validation, and prioritization. When possible, constraints analysis leading to individual and community action was included in focus group activities. Having presented sessions on focus groups, facilitation skills, conflict management, ranking and prioritizing,

stakeholder analysis, and causes and opportunities during training, the project team asked EOs to formulate and facilitate just such meetings. The project team, MOA personnel, and EOs discussed the possibility and advisability of changing course and agreed that such a change in the process was justifiable and feasible.

Round Two

The project team communicated the decision to reformulate the second round of regional fieldwork to regional teams. Regional teams were to continue data collection, as per Round One, to meet their target number of farmer interviews and to synthesize and organize Round One data according to the regional reporting format presented in training. EOs were given latitude in constituting focus groups. The project team suggested that they be of a manageable size (8 to 12 people), have something in common (a common constraint, people in close proximity, or an existing group of people), and be scheduled at times and places convenient to farmers.

Conducting PRAs requires flexibility to react to findings, and adapt methods to meet emerging needs. Therefore, early efforts at setting up and facilitating focus groups were part of that adaptive process. The project team and EOs eventually agreed upon a round of focus groups designed to: (1) convene a meeting of farmers; (2) present the list of constraints derived locally during Round One; (3) facilitate farmer ranking and prioritizing of constraints; (4) differentiate between symptoms and causes of constraints; and (5) facilitate farmer derived solutions to any of the underlying causes that farmers felt they could reasonably address. The rationale for focus group meetings presented in reports to FAO and the MOA included empowering farmers, helping them prioritize constraints, and facilitating their development of personal and community action items,

all of which are associated with PRA. The outputs of farmer focus group meetings were described as tangible and specific outcomes to be acted on by farmers, EOs, MOA and other stakeholders. Focus group outputs (ranked constraints, delineations between symptoms and causes, and potential action items for farmers and EOs) complemented Round One data and became important findings in each regional report.

Field Work Outcomes

The project team's primary interest in fieldwork was creating an overall picture of the agricultural sector from the perspective of farmers and to find logical entry points for collaboration between them and EOs. The picture had to represent the diversity of livelihood systems, socioeconomic situations, and complex strategies of farmers in St. Lucia. Based on the original project plan, the project team assumed that EOs could not have this total perspective, and fieldwork was conducted so that EOs and the project team would discover these realities together. By the end of Round One of the PRA, EOs, MOA personnel, and the project team had indeed painted a reasonably complete picture of the situations facing farmers. That picture was painted by EOs' selection and use of tools presented during training, and refining those data during focus group meetings.

While maintaining the need to create a picture of the agricultural sector, identifying and addressing gender issues remained a challenge. Although one-third of all farmers interviewed were women and disaggregated data were collected, the importance of interviewing women and looking at gender was difficult for the male EOs to understand. EOs canceled a few farmer interviews when "the farmer was not home, only the woman was there." EOs occasionally ignored women if they were present during an interview of a man, revealing their assumption that the men were the decision makers. These

symptoms were treated as they arose and the project team continued training EOs throughout fieldwork.

EOs presented information on every farmer they had interviewed, including livelihood system type, constraints, opportunities, and gender considerations at the end of each day. By the second week of fieldwork, EOs had gained a level of understanding of gender issues, and could articulate them to other EOs and the project team. For example, EOs began including women in conversations with male farmers by asking them to verify information. By the end of the PRA in St. Lucia, EOs were well versed in the language of gender but needed practice identifying when and where it was a driving factor, and how to address it in their daily work.

Regional data management uncovered an institutional gender issue of MOA staff members that was never adequately addressed. To convey a sense of ownership, the project team gave EOs responsibility for entering each region's data in spreadsheets, and wanted electronic copies within a few days of moving on to the next region. Had the project team continued stakeholder analysis through a gendered lens, they would have realized that women, whether EOs or regional office administrative assistants, were the most computer literate and bore responsibility for regional data entry. Male EOs gave their hand written pages to female administrative assistants or EOs to type. Neither the project team nor EOs had identified the administrative assistants as stakeholders, yet they were the lynch pin in turning hand written flip charts into databases. The project team eventually recognized and addressed the importance of these women in the process, ascertained their training needs and trained them in the use of spreadsheets, graphics programs, formatting, and basic troubleshooting for computers. While some symptoms

were treated, the underlying causes were not addressed. The underlying aspect of this gender issue is sexism that is easier seen than discarded or changed.

The shift to focus groups for the second round of fieldwork reflected the project teams' realization that a perfect picture of farmers' realities was not, in and of itself, going to reorient extension delivery in St. Lucia. Therefore Round Two was designed as a way to initiate change in the roles of farmers and EOs. Returning information to farmers was intended for verification but also to show farmers that EOs, and by association the MOA, were listening and interested in understanding and addressing their situation. By encouraging them to dissect symptoms and causes, EOs began empowering farmers to examine their constraints critically, and begin taking ownership of the process of change rather than remaining passive recipients.

EOs' stake in fieldwork was data collection sufficient to reach the targeted numbers of farmers and identification of major issues facing farmers in their regions. Some regional teams used fieldwork to introduce themselves to farmers they had not worked with previously, while others added the data to existing databases of agricultural production activities. Other EOs had internalized overarching project goals and sought to enrich their relationships with farmers. EOs had a real interest that fieldwork not raise farmer expectations of EOs, which they may or may not have been able to meet. This concern among EOs emerged from previous efforts to help farmers that left some of them frustrated and suspicious of any new project efforts.

With the initiation of Round Two, EOs' stake in fieldwork expanded to include data validation and analysis in their new role as facilitators. Some EOs approached this role as a way to encourage farmers to be proactive and not wait for government

assistance, encouraging them to work toward their own solutions to problems. Other EOs had a more difficult time not engaging in focus groups as participants or becoming defensive when they themselves were identified as constraints to farmers' progress. This could be attributed, at least in part, to the fact that many EOs were farmers in their own right. Lack of detailed preparation for their specific duties as facilitators contributed to this situation and so did the project team's underlying assumption that EOs were willing to change their relationship with farmers.

This analysis of the PRA in St. Lucia has not discussed the roles of farmers. Not surprisingly, farmers painted a comprehensive picture of their struggle to survive within the agricultural sector, and their struggle had less to do with the extension staff than with their history and current position within the global economy. St. Lucian farmers suggested they could grow anything. Their primary concerns did not involve increasing production or productivity; their primary concerns were markets for their crops, both domestic and international. Given the country's history (see Chapter 4), farmers expected their government to lead the way. EOs recognized that livelihood security for farmers is not a simple matter of more effective extension delivery in St. Lucia.

Data Synthesis and Analysis Approach

During three months of PRA fieldwork in St. Lucia, EOs, MOA personnel, and the project team conducted 280 individual farmer interviews and 24 focus group meetings attended by 216 farmers. Concurrent with Rounds One and Two of the PRA, the project team and regional teams were synthesizing, organizing, and managing the resultant data in preparation for reporting and presentation at a national workshop to follow fieldwork.

At the end of the first round of PRA surveys in each region, efforts were made to ensure that all data generated in each region were left with regional EOs, and each region had control of the information generated pertaining to farmers interviewed. This step is an important part of PRAs because it reverses the top-down control of information. In St. Lucia, EOs strengthened their bond with farmers when they explained that the data would reside with them (EOs) in regional offices, to be acted upon by regional teams in collaboration with farmers.

The project team reviewed regional reporting requirements with each regional team and referred to the outline presented during training. Regional teams were instructed to organize and synthesize their data and begin compiling their reports. The project team was available to answer questions or assist them as time permitted. Following Round Two focus group meetings, discussions between the project team and regional teams set out strategies for incorporating Round Two findings into regional reports. Regional teams were also to prepare presentations of their results to be delivered at the final workshop.

The project team maintained nearly constant contact with regional offices regarding their preparation of regional reports. The project team realized that leaving each regional team with data and an outline for their reports did not ensure reports got written. The project team was able to traverse the island to each regional office offering guidance, skills and equipment in support of regional report writing.

Reporting Requirements

In addition to supervising regional report writing, the team leader and project team were responsible for synthesizing, analyzing, and compiling nation-wide data for reports

to FAO. These included: (1) a profile of each of the eight regions incorporating data collected through the PRA including production activities, scheduling and marketing arrangements, technical support requested by farmers, and establishment of demonstration plots (Sullivan, Litow, and Spring, 2000); (2) a synthesis report of the eight regional PRAs consisting of the range of livelihood systems, major constraints and opportunities, suggestions for institutionalizing gender-based agricultural planning and application, and implications of all of these on strengthening extension delivery systems (Spring, Sullivan, and Litow, 2000b); (3) a strategy report incorporating main findings of the PRA suggesting guidelines for the advancement of the rural and agricultural sectors, and the economy of St. Lucia in general (Spring, Sullivan, and Litow, 2000c); (4) a strategy paper for incorporating participatory methods to generate collective ownership for strengthening extension delivery systems (Spring, Sullivan, and Litow, 2000d); and (5) a report on the methodology used to construct and conduct the PRA including constraints and recommendations for follow-up to PRA results (Spring, Sullivan, and Litow, 2000e).

This process coincided with planning for the national workshop held one week after the end of fieldwork. Having focused their efforts on training and procedural and practical aspects of fieldwork, the project team switched to converting field data into reports and recommendations. While more data existed than could be reported in some aspects, other points of interests identified by FAO and the MOA had not been as deeply explored during fieldwork. Having adhered to the inductive process of data collection and assembly inherent in PRA, the project team could not predetermine that all field data would meet or match all the exact requirements of FAO as set out in Terms of Agreement

and regional reporting formats. The project team synthesized and analyzed the data generated by the PRA, and found few gaps.

With the return of the project leader to St. Lucia as per the Terms of Agreement (explained previously in this chapter), the project team and MOA personnel organized existing data, identified gaps, and reporting responsibilities. The project team wrote the report in concert with preparation for the final workshop for presentation of region-specific and national results. Given the magnitude of reporting requirements for the project team, it was decided to direct the final workshop toward filling gaps in the data necessary for regional reports and consultant reports to FAO.

Data Synthesis and Analysis Outcomes

The project team's primary interest following the completion of fieldwork was assisting regional EOs in data synthesis and analysis. The project team fully participated in fieldwork and developed close working relationships with EOs, which continued with their support of EOs until all regional reports were completed. Synthesis and analysis of regional PRA data and conversion into reports were the first steps in preparing results of fieldwork. Only after regional findings were synthesized and analyzed could the project team write reports for submission to FAO and the MOA.

The EOs' stake in data synthesis and analysis was summarizing their fieldwork, submitting their regional reports, and having sufficient data to present at the final workshop. EOs had little experience preparing the type of report on regional PRA findings required by the FAO representative. In addition to lack of experience, the regional reporting format presented in training and was subsequently amended by the FAO representative. Part of the challenge of preparing regional reports was the project

team's preference that compiling reports be a team effort within each region. The rationale behind this expectation was that all team members had participated in fieldwork and had a stake in the outcomes. It also increased the likelihood that those officers whose voices were not typically heard were recognized as contributors. It became apparent that team reporting was not a regular part of most EOs operating procedures and many regional teams had difficulty delineating responsibilities, reaching consensus, or collaborating. Therefore, the project team worked with each regional team of EOs, expanding their capacity to organize and synthesize data, and collaborate on a final product. Having seen regional extension reports produced before the PRAs, the project team felt confident that EOs' capacity to synthesize data, analyze it, and create reports for presentation had been expanded.

The MOA's stake in data synthesis and analysis was a desire for good data on farmers and farming in St. Lucia. Given the changing face of the national economy and agriculture's role within it, the MOA was committed to helping farmers become more efficient and saw PRA data as indicators of targets for their efforts. The MOA had contributed significant staff time to PRA fieldwork and those individuals were interested in the outcomes on a personal level. The FAO representative required synthesized and analyzed regional data for the next component of the project: regional extension program planning.

Final Workshop Approach

According to the Terms of Agreement, the PRA findings were to be presented at an end of project national workshop. These findings would be used to establish strategic and programming guidelines for future extension program planning, and include

strategies for incorporating gender-sensitive approaches to program design and delivery. However, at the last minute, the FAO representative suggested that the workshop focus on technology gaps identified during the PRA with corresponding strategies for addressing these gaps by using demonstration plots. While possible demonstration plots had been considered during both rounds of fieldwork, they had not received special attention by EOs or the project team. Each region compiled and presented their findings and addressed this additional issue.

Following the final workshop, the project team spent their remaining week and a half in St. Lucia organizing data for completing the other four reports while helping regional teams polish theirs. During the final workshop, the project team recognized that in addition to regional reports produced by regional extension teams, FAO sought regional profiles compiled by the project team. These regional profiles were compiled by the project team with help from EOs and delivered to FAO before the team's departure from St. Lucia. Upon returning to Florida, the project team devoted one week to writing reports for FAO and the MOA according to the Terms of Agreement. The project leader spent additional weeks finalizing each report before submitting final deliverables to FAO and the MOA.

St. Lucia Summary

The project team was contracted to meet short-term goals and outputs, while laying the groundwork for long-term change, and designed a three-month project to do both. In doing so, it focused on changing how EOs saw farmers, and by association how farmers saw EOs. EOs were asking different types of questions, facilitating focus groups, and interacting differently with farmers. EOs were equipped to meet short-term outputs and

encouraged to make long-term change. Of all stakeholders, the MOA likely had the clearest picture of scaling up results of the PRA, and how they were in position to respond to the outcomes because they had more power to implement change than any other stakeholder. The FAO representative expected short-term results with EOs capacitated to make long-term change.

The project team saw the PRA as a way for EOs and farmers to build stronger, collaborative relationships. In addition to assuming that either or both of these groups thought this a good long-term idea, the project team assumed that the MOA would facilitate or respond positively to this shift in power. However, the project did not include activities designed for capacity building to prepare the MOA to respond to the outputs generated by a PRA. Having agreed to implement the project to strengthen extension delivery services, the MOA could not have known what types of recommendations would emerge, and was therefore under no obligation to address them.

Lessons Learned

1. Implementing PRA and using participatory tools requires flexibility. Part of the appeal of PRA and participatory tools is their potential to lead to new findings and avenues of inquiry. As a result, stakeholders must be flexible enough to adapt to changing conditions while keeping goals in mind. Several examples emerged from the St. Lucia case including EOs' understanding the need to take responsibility for building up livelihood system types in the early days of fieldwork. A second example was the decision to break fieldwork into two rounds in response to EOs' concerns about how the schedule would affect their outputs. A third example was turning the second round of fieldwork into focus groups with EOs and the project team refining expectations after each meeting.
2. While a solid training program is necessary to prepare people to undertake PRAs, it must be seen as an ongoing process. Basic theories, tools and techniques must be presented as clearly as possible and should reflect local realities whenever possible. However, the bulk of training and refining tools and techniques occur in the field. Therefore, training does not end until the project is over. In St. Lucia, training on issues ranging from gender to trouble-shooting for computers continued until the end of the project.

3. Stakeholder analysis must be an iterative process. As participatory projects evolve, all stakeholders expand their understanding of the situation under investigation. Expanded understanding may change stakeholders' interests or roles and must, therefore, be monitored to ensure that these changes are recognized. EOs in St. Lucia went from trainees, to researchers, to facilitators, to analysts, and finally to writers and presenters in less than three months. Their needs changed with each change in roles. While the project team facilitated and monitored these changes, EOs themselves may not have recognized the significance of their accomplishments.
4. Outcomes of participatory projects, including PRAs, are somewhat unpredictable because they are meant to respond to the needs of local people rather than outsiders (Spring, et. al, 2000, p. 3.5). Therefore, different stakeholders may have different expectations of participation. This could be said of stakeholders in St. Lucia where the MOA, FAO representative, project team and EOs had slightly different expectations of the nature of outcomes. All of these expectations were negotiated and met by project end. However, had they been explored earlier and more frequently, local stakeholders could have collaborated with the project team to devise strategies for addressing them.
5. EOs in St. Lucia had a deeper understanding of farmers and their livelihood systems and strategies than indicated by the project plan. However, they may have lacked the ability to link these realities with the larger (national or global) picture.

PRA in Dominica

By the fall of 2001, this researcher was negotiating with the FAO representative to undertake a PRA in Dominica that was based on an FAO project plan similar to that from St. Lucia. FAO issued no Request for Proposals, and the representative suggested no proposal needed to be submitted by the project team based upon the "excellent work" done by them in St. Lucia (personal communication, January 24, 2002), however he stipulated that the project team for Dominica be limited to two people.

The team leader for Dominica, this researcher, sought to negotiate the removal of redundant reporting requirements and a limited number of trainees given the smaller project team. The FAO representative's negotiating points pertained to training: (1) that it be more technology and less participation oriented; (2) planning processes must be

included; (3) market linkages and techniques for working with farmer groups be presented; and (4) EOs visit farmers during training so they could practice tools and techniques. Reporting formats were changed slightly and a field day during training was agreed upon. Ironically, having questioned the utility of focus groups in St. Lucia, the FAO representative specifically incorporated this step into the project plan for Dominica.

In discussions about the general atmosphere within the MOA in Dominica, the FAO representative intimated some existing conflicts without elaborating, and claimed that among extension staff there were those who saw the need for gender analysis training and an anti-gender faction (personal communication, January 24, 2002). Otherwise EOs were selecting project sites, and preparing for the same activities as had been conducted in St. Lucia as indicated in figure 5-4.

Planning Approach

The project plan and Terms of Agreement for Dominica were scrutinized for specific outputs, and project data from St. Lucia were mined for lessons learned. The project team made several decisions to try to build upon the successes of St. Lucia. The first decision was increasing the focus on EOs as the primary stakeholders in the project rather than farmers. Although farmers were the intended beneficiaries, they were not the target audience of the project, EOs were.

The second decision was to redirect training away from a box of tools for participatory data collection toward an overall picture of the PRA. The project team recognized that pre-determining data collection tools might take power to decide out of EOs' hands but assumed that farmers' livelihoods in Dominica would be similar enough to those in St. Lucia to be assessed using the same tools used by EOs in St. Lucia.

	PRE- DEPARTURE December 2001- February 2002	IN COUNTRY (weeks) February 19-April 29 2002										Participants
ACTIVITIES		1	2	3	4	5	6	7	8	9	10	
Project Proposal Preparation	N/A											Team leader, Interested grad Students
Training Design, Session Plans	February 2002											Project team
Initial Reconnaissance												Project team FAO rep., MOA EOs
Training Program												Project team, MOA personnel, EOs
Round One Farmer Interviews												Project team, MOA, EOs Farmers
Round Two Focus Groups												Project team, MOA, EOs Farmers
Data Synthesis & Analysis												Project team, MOA, EOs
Presenting Results Wrap up												Project team, MOA, EOs

Figure 5-4. Timeline of PRA activities in Dominica

The third decision was to develop a system of data management before leaving for Dominica. All deliverable reports were outlined before the project team left Florida. Faced with producing virtually the same number of deliverables with a smaller project team in a shorter time period, this decision was meant to streamline the process. Each of these decisions will be further explored in this section.

The project team had to streamline project activities while planning for Dominica because the contract with FAO specified no more than two members were allowed on the team. Having the benefit of experience in St. Lucia, the project team approached Dominica with an eye toward the big picture and a sense of expected outcomes. Based

on outcomes in St. Lucia, the project team felt certain that Round One activities—individual farmer interviews—would generate sufficiently rich data to meet expected outcomes. So, in addition to discrete project phases (training, Round One, Round Two, etc.), the project was conceptualized as a process designed to change the relationship between EOs and farmers. The project team did less background research on Dominica, focusing on how best to prepare EOs to change their approach to relating to farmers, applying new approaches in the field, and organizing the results.

In addition to training EOs to use participatory tools, planning for Dominica included an exploration of why they would use them in the first place. Based on experience in St. Lucia, the project team did not assume that MOA would be responsive to recommendations emerging from the PRA and conceptualized a process whereby farmers and EOs could implement change without higher institutional support in the event it did not materialize. The project team's underlying objectives were to get EOs to: (1) listen to farmers and each other and (2) think outside the box. These objectives were in addition to those the project team expected from the PRA in St. Lucia, having EOs' better understand farmers' realities.

The project team presented its proposed training design to MOA, EOs, heads of regional extension teams, and the FAO representative during the first week in Dominica. All agreed that it appeared sound and was flexible to incorporate changes as needed. The number of participants to be trained was brought up during this meeting and a guess was put at 50 participants with more to be added as needed. The team leader indicated that the larger the audience, the less effective the training and her expectation was that everyone who participated in training would participate in fieldwork. Other than

dignitaries present during the opening session, all 39 participants in training participated in fieldwork.

As in St. Lucia, the MOA in Dominica raised the issue of survey size during the week before training. Its expectation was for a survey large enough and directed to fill gaps in their national agricultural census. But PRA requires conversations, not questionnaires. The project team and MOA calculated person days in the field to arrive at a target. Reluctant to accept reduced data, an MOA official volunteered the entire national extension staff (32 EOs) for every day of fieldwork. His offer committed the entire field staff to almost a full month of PRA fieldwork. A final point of agreement involved acknowledging EOs as farmers in their own right during training. While this had raised ethical issues in St. Lucia, no such concerns were raised in Dominica.

Planning Outcomes

The project team's experience in St. Lucia allowed it to plan the PRA in Dominica as a process focusing on two levels. The first level, which reduced EO participation in decision-making, pertained to the specific goals and expectations of the MOA and FAO. The second level, which increased EO participation in decision-making, was empowering EOs to change their relationship with farmers. Farmers were not considered the primary stakeholders although their participation was instrumental to achieving project goals. The underlying assumption was that EOs had to drive the process of change, not farmers. Toward this end, the project team focused on EOs' realities rather than that of the farmers.

By focusing on the process in addition to content, the project team was flexible in response to emerging expectations from other stakeholders. The project team planned

activities aware of short-term and long-term goals and expectations, and the likelihood that lasting change would stem from within the ranks of EOs and not the MOA. During the planning phase, the lead consultant sought to understand where the PRA fit within the 18-month long project, and what specific outputs were expected from the FAO representative. Results of these conversations were conveyed to EOs.

Training Approach

The project team planned and delivered a 5-day training workshop to 32 EOs, three livestock officers, and four participants from other agencies. The objectives of the training program were for participants to: (1) understand principles of, approaches to, and techniques for using participatory methods in extension work; (2) acquire the skills and tools to identify production constraints, and be able to facilitate working toward solutions with farmers; and (3) be able to identify, analyze, and address the impact of gender on agricultural production systems.

Having conceptualized training as a preliminary step in the two and one half month long process, the project team organized it into five thematic areas, one per day. Day One set the stage for the project giving background and theory on participation, facilitation, gender, and monitoring. Day Two related to identifying the livelihood system and its components and included wealth ranking, and field tools such as system diagrams, activity profiles, seasonal calendars, and access and control profiles. Day Three was devoted to participatory problem solving and introduced focus groups, constraint identification, ranking and prioritizing, identifying causes and finding solutions. Day Four was a hands-on field day interviewing local farmers and conducting focus groups. Day Five of training focused on participatory program planning and

covered inductively building demographic profiles of farmers from fieldwork, data management, regional reporting, and program planning.

In designing the training for Dominica, the project team had decided in advance which tools EOs would use in the field. The most frequently and successfully used tools in St. Lucia were presented to EOs during training in Dominica. Compared to St. Lucia, EO participation in determining how to characterize livelihood systems was curtailed in Dominica because the project team relied on the process from St. Lucia. Rather than EOs selecting from a variety of tools to better understand farmers' livelihood systems, this approach standardized diagnosis of the livelihood system and encouraged increased attention to farmers' motivation, goals, constraints and opportunities. It was within this socioeconomic realm of data that EOs had flexibility to decide what information to standardize. The project team left this negotiation up to EOs and, as in St. Lucia, assured them that these data belonged to them. With tools for diagnosing livelihood systems standardized *before* training, farmer profiles of socioeconomic characteristics were standardized within the first three days of fieldwork. By pre-determining the data collection tools to be used in the field, the project team in Dominica disempowered EOs. This was justified by increased emphasis on facilitation skills for working toward actionable items with farmers during Round Two. Templates for organizing these data, along with protocol for farmer interviews and farmer focus groups were compiled and presented as a PRA field manual as per contractual requirements.

With two trainers and a limited number of tools to present, the project team designed a training program with few lectures and handouts, but significant group work and processing. EOs as farmers was not negatively perceived in Dominica, and using

EOs' farming experiences as data for training exercises aided in this effort, and personalized the tools and skills. Unable to facilitate each small group during training, the project team was available to answer questions but encouraged EOs to take ownership of the process and collaborate with each other to find solutions. This approach was possible because the project team had pre-determined how, where and when EOs and farmers would participate in the process. It should be reiterated that following St. Lucia, the project team realized that EOs could collect a significant amount of rich data from farmer interviews. Believing that this would be the case in Dominica, the project team increased their efforts to prepare EOs to facilitate farmer focus groups at the expense of EO decision-making in Round One activities.

Among the data collection tools selected by the project team during planning were tools designed for collecting gender disaggregated data. Mirroring the most frequently used gender-sensitive tools in St. Lucia, these included gender-disaggregated seasonal activity calendars and access, control, and benefits matrices. Expecting that these data would be collected, the project team sought to increase EOs awareness of gender so that in addition to recognizing it, they could formulate strategies to address it within their normal activities.

The project team had been told to expect that gender would be a sensitive issue within agricultural extension in Dominica. They also knew that examples they needed to increase EOs' awareness of gender could be derived from EOs during training. An example emerged when one EO admitted prohibiting his daughters from riding their bicycles after they were eight or nine years old while his teenage sons continued to ride theirs. He commented that his daughters 'preferred' reading or working on computers in

the house. Further exploration revealed that their preferences did not determine their activities, his had. Another EO told the story of his mother's role in the family farm, and how he had never considered her a 'farmer' even though she made many production and marketing decisions.

Therefore, gender was integrated with the major themes of participation and facilitation, and presented during the first day of training. Each of these major themes was explored and contextualized based on the assumption that EOs would more easily incorporate participation and recognize gender in the field if they understood it in their daily lives. Participation and gender were woven into each subsequent session, tool, and technique during training. While the female project team leader presented participation and facilitation, the male consultant presented the initial session on gender. He demystified what had come to be a misunderstood issue among EOs in Dominica.

Training Outcomes

As in St. Lucia, training in Dominica set the stage for the rest of the project. With two project team members available for training and fieldwork, the training was designed to increase EOs responsibilities in fieldwork as well as ownership of a process they could continue after the PRA was completed. The project teams' short-term goals were: (1) training EOs to engage farmers in discussion about their livelihood systems; (2) encourage EOs to see farmers as operating within an environment of influencing factors; and (3) data collection to reflect the situation of the agricultural sector. Of these short-term goals, the last was the easiest for the project team to accomplish, and they did so by prescribing data collection procedures and tools. Having told EOs how to collect the

data, the majority of time was spent discussing why it was important to understand farmers' livelihoods from the farmers' perspective.

Unbeknownst to the project team, a number of EOs were frustrated enough with the MOA to want to change their relationships with farmers independent of MOA personnel. The decline of the agricultural sector in Dominica had been publicly associated, at least in part, with ineffective extension delivery. This motivated some EOs to internalize approaches and strategies for changing the situation. EOs responded to strategies for repositioning themselves and articulated their own constraints to doing so. While generally pleased with training, EOs' most frequent comment during evaluation was disappointment at the lack of the MOA presence during training.

Fieldwork Approach--Round One

MOA personnel and regional EOs scheduled both rounds of PRA fieldwork in Dominica, including logistical matters such as meeting times and places and arrangements for meals. The project team made their expectations clear in terms of a cross-section of farmers, diversity of livelihood systems, and protocol for interviews. Each day of fieldwork began with logistics and reminders of tools and techniques, distribution of templates for recording data, and assignment of teams and geographic areas to be covered.

Round Two

EOs in Dominica were trained to convene and facilitate focus group meetings designed to verify and validate information collected during Round One. This included ranking and prioritizing constraints, delineating between symptoms and causes, and helping farmers develop action items to address issues within their control. Themes

around which EOs could convene focus group meetings were explored during Round One, and each region was able to schedule and conduct at least 4 meetings.

The role of these meetings in the overall project was articulated during training and EOs understood the premise that farmers had a role to play in addressing their own needs. This point had been made during training when the project team elicited EOs' constraints to doing their job. These self-identified constraints were then used as the basis for training in ranking and disentangling problems before working toward solutions. Just as EOs were told to look for solutions other than 'MOA has to fix the problem,' they explained to farmers that MOA could not possibly solve every problem of every farmer on the island.

Fieldwork Outcomes

EOs undertook farmer interviews to understand and clarify farmers' realities. This included gaining an appreciation for their livelihood activities, strategies, labor and marketing arrangements, and gender considerations. Although compiling systems data was the most time consuming task, EOs frequently discussed where particular farmers fit into the bigger picture of agriculture in Dominica.

The entire national extension staff participated in Round One of fieldwork in each region. More teams in the field meant more data collection and higher targets, as well as more information to be processed, probed and shared at the end of each day. Due to standardized data collection templates, the same categories of livelihood system data were collected during each interview across all regions. By the third day of fieldwork, EOs had given the project team their final farmer profile of socioeconomic information to be collected and incorporated in regional findings. Data entry was managed by the

project team and began after the first day of fieldwork. While one or the other project team member was always in the field, days out of the field were scheduled to attend meetings, manage data, or plan next steps.

Following the process from St. Lucia, daily processing of PRA data in Dominica was done to give EOs control of the information collected. However, rather than presenting all data on each farmer interviewed each day, EOs presented a few in-depth cases. These were followed by group discussions of daily themes suggested by the project team or EOs. The most frequently discussed themes were farmer constraints, opportunities or plans for diversification, pest and disease problems, gender issues, ideas for possible demonstration plots, and potential focus groups.

This approach to daily sharing and processing evolved for two reasons. First, all EOs participated in fieldwork in every region, and after a few days of fieldwork, presentation of standardized data on individual farmers became repetitive. The project team reminded EOs that everyone needed to control all of their regional data in order to participate in analysis and synthesis. EOs reminded the project staff that the majority of daily participants were from regions other than the one in which fieldwork was being conducted. EOs suggested a compromise whereby two or three farmers were presented in-depth, followed by sharing and discussion of interesting points discovered during that day's fieldwork. Second, the project staff's recognition that the EOs suggestion indicated their interest in moving from data collection to data analysis.

As suggested by MOA personnel, the majority of the national extension staff participated in Round One farmer interviews in all project regions. This resulted in 287

individual farmer interviews, 74 with female farmers, and allowed EOs to learn about issues facing farmers in other parts of the country, not just within their own regions.

MOA personnel were absent from training and fieldwork, an absence that seemed to encourage EOs to take matters into their own hands. Depending on their relationship with MOA personnel, EOs either preferred the status quo or saw the PRA as an opportunity to increase their own participation in decision-making. The project team and EOs encouraged all available MOA personnel to join field teams for farmer interviews or to join the end-of-day sharing and processing whenever they were available. EOs valued their own efforts and expected validation by the MOA. MOA personnel joined teams in the field on the final day of Round One interviews.

Increased gender awareness on the part of EOs emerged *slowly* throughout fieldwork, as they began having discussions with farmers about their livelihood systems, constraints, opportunities and objectives. While more adept at recognizing gender than prior to training, many EOs still assumed that men made agricultural decisions in jointly headed households. Some EOs eventually realized the need to check their assumptions by asking questions about division of labor, decision-making, access and control of resources and benefits. More gender issues emerged during processing when EOs discussed redefining their target audiences—toward smaller, poorer, or less obvious farmers—many of whom were women.

Having collected individual farmer data during Round One, EOs facilitated solutions to farmer-identified constraints in Round Two. The process that had been developed in collaboration with stakeholders during fieldwork in St. Lucia had been refined in Dominica. While all EOs were involved in focus group facilitation, some were

more adept than others. Beginning with the 'practice' focus group convened during the training program, the project team remained in the background of meetings and offered moral support more than any type of guidance. Seventeen focus group meetings were convened, attended by 111 farmers.

Data Synthesis and Analysis Approach

The project team had made data management a priority during the project in Dominica. Given a project team of two and a ten-week project calendar, time available for data synthesis, analysis and reporting was limited. Databases from Round One and results from Round Two were complete and in the hands of the project team by the end of fieldwork and the beginning of synthesis and analysis. Having presented the regional reporting format at training, the FAO representative indicated his expectations of the outputs of each regional team of EOs after completion of the PRA. The project team had compiled and returned complete data sets to each region, along with a copy of the regional reporting format shortly after the completion of fieldwork. This left regional teams a week and a half to complete reporting requirements before the final workshop.

Additional pressure was put on all EOs by the fact that only 4 of 6 administrative regions of Dominica were surveyed under the FAO sponsored PRA. The MOA had committed EOs to carrying out the same process in the other regions and had requested support from the project team. The last two regions were surveyed a week before the final workshop. The project team offered regional teams of EOs assistance by inviting them to the project office for help formulating and formatting their reports.

Synthesis and Analysis Outcomes

Converting data into expected outputs takes a particular set of organizational and analytical skills. Collaborating with a team to turn data into a report is a more challenging task, particularly for people with little experience. EOs had enhanced their understanding of farmers in Dominica during the PRA, and could discuss implications of constraints and possible solutions for farmers within and across different livelihood systems. EOs realized they could not address every farmer's needs but they had a clearer understanding of the situation. Turning this understanding into acceptable outputs provided another opportunity for collaboration between EOs and the project team.

Final Workshop Approach

The project team planned the final workshop to review findings and assist EOs in further synthesis and analysis of their data in search of actionable items in response to farmer identified needs. This step was considered crucial to the process designed by the project team, and was an outcome EOs and the project team expected to meet together. The FAO representative considered this step part of regional report writing and expected it to be completed before the final workshop.

In the weeks leading up to the final workshop, the project team and the FAO representative communicated regarding an appropriate agenda for the final workshop. An agenda was agreed upon that included an overview of findings by the project team, regional presentations of results, identification of regional information gaps, and strategies for addressing them. The workshop was to end with an introduction to next steps for EOs, mainly turning regional PRA results into regional extension plans.

The final workshop proceeded under the direction of MOA personnel and the FAO representative. It included regional report writing, presentation of regional results and trends, identification of information gaps in regional information, and a presentation by the project team of strategies for incorporating gender into extension program planning and delivery, and working with farmer groups.

Following the final workshop, the project team organized all data and equipment for transfer to MOA personnel. A final meeting of the project team, MOA, and regional heads served to review findings and next steps for regional teams. The project team remained in Dominica for one week writing reports and consulting by telephone with regional teams still engaged in report writing. Upon returning to Florida, the project team devoted one week to finalizing and submitting reports to FAO according to the Terms of Agreement.

Final Workshop Outcomes

Devoting part of the final workshop to regional report writing gave regional teams time, space, structure and guidance for writing their reports. EOs' ownership of the process was exhibited by their insistence on working as regional teams to produce reports that accurately reflected the reality captured on the ground, above and beyond those points of interest to the project team, the MOA and FAO.

Dominica Summary

The project team left Dominica having satisfied short-term goals and believing that EOs had increased their capacity to establish and maintain dialogue with farmers. In St. Lucia, the MOA presence during training, fieldwork, data synthesis and analysis, and wrap up were strong. However, MOA presence in the same activities in Dominica was

limited. This may have reflected a certain misunderstanding of long term implications of the project by the MOA, or that the MOA in Dominica was not fully prepared to respond to recommendations emerging from the PRA.

Lessons learned

1. The first lesson for the project team was to build on lessons learned in St. Lucia while remaining flexible and responsive to stakeholder expectations and farmers' realities in Dominica. Having a successful model to work from (St. Lucia) allowed the project team to standardize certain activities while expanding EO participation in others. It also gave the project team insight into expected outcomes and next steps, which they could share with EOs. This flexibility was facilitated by the similarity between the project plans, stakeholders, and gendered political ecologies of the two countries.
2. The second lesson learned in Dominica was the importance of identifying and determining a target audience and focusing efforts on them. Recognizing that EOs in Dominica understood farmers' livelihood systems and strategies allowed the project team to focus on empowering EOs to reorient that relationship. Having identified EOs as primary stakeholders during project planning, the project team empowered EOs to make decisions and carry out project related activities without their close supervision. In this way the project team modeled empowerment.
3. PRAs and/or participatory development projects are rarely all participatory all of the time. The project plan in Dominica was structured such that the project team could, and did, choose why, when, and how the target audience (EOs) participated. At the same time, it is necessary to allow for other stakeholder groups to enter or exit the process according their needs and expectations.
4. Facilitating stakeholder participation is a dynamic process. In addition to the flexibility suggested in Lessons Learned from St. Lucia, it requires recognition that stakeholder groups consist of heterogeneous individuals. In stressing the need for EOs to recognize diversity within the farming population, the project staff recognized diversity within EOs and MOA personnel. ✓

PRA Findings: Gendered Resource Use

The third and final segment of the adapted MERGE framework incorporated in this chapter presents findings from the PRAs in relation to gendered resource use. Therefore this section offers selected outputs of the PRAs in both countries. These include disaggregated data on individual farmers, farmer and EO generated ideas for

demonstration plots, and issues addressed during Round Two focus groups. Outputs of Round Two, such as ranked and analyzed farmer-identified constraints are presented. Due to the flexible nature of PRA, not all regional data sets within St. Lucia or Dominica were the same, nor were regional approaches to analyzing, synthesizing, and presenting their findings. EOs maintained flexibility in compiling and presenting regional findings according to the regional reporting outline supplied by the FAO representative (see Regional Reporting Outlines in Appendix C). Nor were national data sets from St. Lucia and Dominica the same. Nonetheless, similar types of information were collected and analyzed in each project.

Farmers interviewed during the PRAs in St. Lucia and Dominica represented a cross-section of the agricultural population in each country according to agro-ecological zone, scale of production, livelihood system type, land tenure type, socioeconomic status, gender, and age, among other factors. Farmers interviewed in each country ranged from high-resource to resource-poor, from large scale (greater than 250 acres) to small scale (less than 2 acres), and from highly commercial to nearly subsistence.

EOs in St. Lucia created a list of factors to be identified at the end of each day of fieldwork. In addition to recording and organizing the data, it served as a monitoring tool to ensure that a cross section of farmers was interviewed. In addition to farmer name, the list identified, (1) system type; (2) whether the farmer worked regularly with EOs; (3) sex of person(s) responsible for agricultural decision-making; (4) age(s) of decision-makers; (5) wealth ranking or resource level; (6) land-tenure; (7) off-farm employment if any; (8) indication of household composition including number and ages of children; (9) participation in farmers' groups; and (10) innovations that the farmer had adopted. EOs

in Dominica followed this lead and expanded the list to include, (1) level of commercial agriculture; (2) type of farming, organic versus conventional; (3) years farming; (4) ecological features; (5) access to roads; and (6) labor and marketing arrangements for each commodity produced. ✓

Fieldwork in St. Lucia and Dominica revealed great variation among farmers within each region surveyed. Each region in each country embodied ecological, social and economic variation across the agricultural population. Therefore the variation within any given region was as great as variation between regions. Few major economic or ecological differences could be generalized between agricultural populations in St. Lucia and Dominica. Small-scale, limited resource farmers in St. Lucia were very similar to their peers in Dominica, while large-scale, wealthy farmers in St. Lucia resembled those of similar circumstance in Dominica. In addition, there was little noticeable difference in the proportions of each type between the two countries.

As previously suggested, livelihood system types were built up inductively by EOs throughout Round One fieldwork in St. Lucia. In order to categorize or group farmers, EOs identified eleven livelihood system types based upon the major enterprise(s) as articulated by farmers during Round One interviews (see table 5-2). In general, the dominant activity was that which produced the most income, or to which the farmer devoted the most resources.

Table 5-2. Livelihood production system type by household head in St. Lucia PRA

System Type	Male-headed	Female-headed	Joint-headed
Rain fed vegetables	18 (7%)	10 (4%)	28 (10%)
Irrigated vegetables	2 (1%)	0 (0%)	1 (.004%)
Greenhouse vegetables	2 (1%)	0 (0%)	2 (1%)
Food and root crops	15 (6%)	7 (3%)	32 (12%)
Livestock	9 (3%)	2 (1%)	12 (4%)
Bananas	36 (13%)	9 (3%)	32 (12%)
Mixed	6 (2%)	2 (1%)	15 (6%)
Cut flowers	1 (.004%)	1 (.004%)	2 (1%)
Tree crops	3 (1%)	2 (1%)	6 (2%)
Root crops	9 (3%)	5 (2%)	0 (0%)
Agro/eco-tourism	1 (.004%)	0 (0%)	1 (.004%)
Total	102 38% of HH	38 14% of HH	131 48% of HH

Source: Spring, Sullivan, and Litow, 2000c

A similar approach to discerning livelihood system types was taken in Dominica.

In addition to economic and labor aspects, EOs sought to elicit other criteria farmers used for determining the importance of various enterprises. According to Sullivan and Barham (2002b),

In order to create an accurate picture of farmers' livelihood systems, each farmer was asked to articulate the enterprise(s) most important to him or her relative to their other agricultural enterprises and why. Each agricultural enterprise was subsequently explored in terms of production activities and marketing arrangements. As such, the designation of a *major enterprise* does not necessarily imply that which is most lucrative, uses the largest land holding, or takes most of the farmer's labour. Rather farmers indicated which enterprises or crops were the most important to them, at this point in time, based upon their own criteria. This method of identifying livelihood system types allows EOs to recognize farmers' priorities and those enterprises likely to receive the most attention from farmers.

A wide range of data was collected in addition to major agricultural livelihood enterprises. For example, Round One data from St. Lucia included, (1) the relative importance of each agricultural enterprise; (2) decision making responsibility for each enterprise and activity; (3) off-farm enterprises and their importance to the household; (4)

major constraints faced by farmers with corresponding opportunities for diversification; (5) gender issues in terms of decision making, and access and control within the household; (6) participation in farmers' organizations; (7) wealth ranking; (8) basic household composition; (9) whether or not the farmer had regular contact with EOs; and (10) land tenure type.

EOs in Dominica built upon this list by including information on (1) agro-ecological characteristics such as altitude and slope; (2) marketing arrangements for each commodity; (3) a scale indicating the level of commerce engaged in by the farmer; (4) access to credit; and (5) years of education and/or farming experience. All of these data were organized, synthesized and subsequently analyzed in reports compiled by the project team, as well as regional teams of EOs. Table 5-3 presents major and other enterprises with corresponding marketing arrangements by gender of farmer in Dominica.

Table 5-3: Production activities and market arrangements in Dominica

Crop/Enterprise	As Major Enterprise	# of Women	As Other Enterprise	TOTAL	Major Markets
Banana	94	22	25	119	DBMC
Plantain	47	8	127	174	Hucksters, Export, Local
Yams	36	5	79	115	Hucksters, Local, Export
Vegetables	23	8	70	93	Local, Hucksters, Supermarkets, Restaurants, Hotels,
Dasheen	22	5	141	163	Hucksters, Local, DEXIA
Citrus	19	5	83	102	Hucksters, Local, Exporter, DEXIA, Supermarket
Livestock: pigs, layers, rabbits, goats, cattle	15	3	86	101	Local, Supermarket, NPPC, Hotels, Restaurants
Tannia	10	0	126	136	Hucksters, Exporter
Peppers (hot & seasoning)	10	0	12	22	Hucksters, Bello, DEXIA, Local, Exporter
Passion Fruit	7	0	13	20	Hucksters, Bello, Local
Cassava	7	0	12	19	Local, Hucksters, Supermarket
Coconut	5	0	39	44	DCP
Sweet Potato	5	2	60	65	Hucksters, Local
Pineapple	3	1	18	21	Hucksters, Export, Local
Cocoa	3	1	19	22	Hucksters, Local, Export

Source: Sullivan and Barham, 2000b.

As explained previously in this chapter, farmer constraints elicited during Round One served as the basis for activities undertaken by focus groups during meetings in Round Two. Specifically, the most frequently mentioned constraints, or those germane to the group, were presented at the beginning of focus group meetings for clarification, validation, confirmation and subsequent analysis. At these meetings, farmers clarified, discussed, and prioritized constraints they had identified in Round One. EOs facilitated the meetings, ultimately leading farmers toward identifying and taking responsibility for actions within their control. Project team members served as observers and resource people to EOs during focus group meetings. Table 5-4 lists the focus groups convened during Round Two in St. Lucia and attendance by women and men.

Table 5-4. Number, type, and composition of focus groups in St. Lucia

Region	Focus group	Women	Men	Total
1	•Livestock	2	18	20
	•Women's group	5	0	5
	•Cassava	6	4	10
	•Greenhouse	0	4	4
2	•Cassava	8	1	9
	•Cocoa	1	5	6
3	•Cassava	4	3	7
	•Road	0	4	4
4	•Road	4	6	10
	•Livestock	4	4	8
	•Food and root	6	8	14
5	•Cassava	2	6	8
	•Vegetable	0	12	12
	•Marketing	2	9	11
	•Land Tenure	1	4	5
6	•Vegetable	1	7	8
	•Irrigation	3	7	10
	•Estates	1	7	8
7	•Cut flowers	8	0	8
	•Poultry	5	1	6
	•Root and vegetable	5	4	9
8	•Mixed and tree crops	4	8	12
	•Banana	3	2	5
	•Vegetable	1	4	5

Source: Spring, Sullivan and Litow, 2000b

Table 5-5 presents the outcomes of one focus group meeting in St. Lucia complete with ranked constraints, possible farmer group actions, opportunities for EOs to intervene, and possible actions to be taken by EOs to help farmers address the issue. These results are representative of the focus group meetings held in St. Lucia and provided EOs with concrete actions they could take alongside farmers to improve agricultural livelihoods.

Table 5-5. Constraints identified and prioritized by Root Crop Focus Group, St. Lucia

Problem	Rank	Group Action	Extension Opportunity	Extension Action
Water	1	-Renovate abandoned reservoir -Construct cement tank -Encourage representative to visit abandon reservoir	-Feasibility study & costing for irrigation -Planning for year round production of vegetables and other selected crops	-Communicate with relevant agencies to carry out feasibility study -Provide farmers with information on construction and costing of cement tank
Poor Roads	2	-Road Maintenance	—	-Encourage cooperation to maintain the roads
Market	3	—	-Promotion of organic foods	-Provide information on cultivation on organic produce
Planting Materials	4	-Farmers sharing planting materials	—	-Encourage multiplication of planting materials
Labour Scarcity	5	-Shared labour (coupe d'main)	—	-Cooperation among farmers

Source: Spring, Sullivan and Litow, 2000b

Table 5-6 presents focus group meetings conducted during Round Two of the PRA in Dominica. Based on the same principles and procedures of those conducted in St. Lucia, these meetings produced similar results. However, as indicated previously in this chapter, the success of this approach in St. Lucia led the project team in Dominica to put increased emphasis on facilitation and problem solving skills during training.

Table 5-7 shows the frequency of constraints elicited from farmers—by major enterprise type—during Round One of the PRA in Dominica. The constraints identified by farmers in Dominica mirrored those mentioned by farmers in St. Lucia. Although frequencies were not calculated for constraints in St. Lucia, the general lists of issues were virtually identical. Issues around markets for produce, input supplies, labor availability, access to credit, road access to farms, and technical assistance from the MOA dominated farmer constraints, across system types and demographics in both countries.

Table 5-6. Number, type, and composition of focus groups in Dominica

Region	Focus Groups	Women	Total # of Farmers
Southeast	1) Plantain Farmers 2) Pig Farmers 3) DREP (Livestock) 4) DREP (Crops)	8	18
East	1) Soil Conservation/Access Road 2) Farmers with Potential 3) Irrigation/Vegetable Production 4) Carib Women	8	23
Northeast	1) Vegetable Farmers 2) Roles of Extension 3) Hucksters/Exporters 4) Young Farmers 5) Farmer Groups	12	40
Northwest	1) Non-Banana Farmers 2) Greenhouse Farmers 3) Irrigation 4) Land Tenure	7	30
TOTAL	17 Focus Groups	35	111

Source: Sullivan and Barham, 2000b

Table 5-7. Frequency of constraints by major enterprise in Dominica (Sullivan and Barham, 2002b).

Frequency of Constraints by Major Enterprise

	Inputs	Markets	Farm Access	Labour	Technical Support	Credit/ Finance	Water Irrigation	Pest/Disease	Praedial Larceny	Land/Terrain	Transport
Banana	65	68	13	18	25	12	11	4	11	3	4
Plantain	27	30	16	11	2	9	7	3	6	1	0
Yam	32	23	4	4	1	4	3	7	2	4	4
Dasheen	14	14	4	3	1	7	3	1	1	0	0
Vegetable	18	15	4	3	2	3	6	7	2	0	0
Citrus	13	15	1	4	2	0	3	7	1	0	0
Livestock	7	8	3	3	2	5	5	0	1	0	0
Tannia	4	4	2	0	0	2	0	0	0	2	0
Peppers	7	6	2	3	1	2	0	0	1	1	0
Passion fruit	7	5	0	0	5	3	1	0	2	2	0
Cassava	4	5	3	0	6	0	0	2	0	0	0
Copra	0	2	0	1	0	0	0	0	0	0	0
Frequency Total	198	195	52	50	47	47	39	31	27	13	8

Following Round Two in Dominica, the project team compiled results from focus group meetings in terms of farmers' perceptions of factors contributing to the constraints they faced. These perceptions emerged from EOs facilitation of focus groups designed to analyze farmer-identified constraints. Round Two was emphasized in Dominica based on recognition that this approach to collaborative problem solving held great potential in St. Lucia. Focus group participants in both countries tended to identify sweeping issues such as inputs or markets as constraints, and after further discussion could identify specific points within each of these issues as relevant to their situation.

Table 5-8 shows six main issues related to accessing inputs for agricultural activities identified by farmers during focus group meetings in Dominica. Each issue is accompanied by a list of related causes for each. Similar activities were undertaken to address market constraints, labor availability, farm access, technical support, access to credit, and access to water.

These specific—or local—issues were those most likely to be addressed by EOs and farmers. These local level issues were also of great interest to the MOAs and the FAO representative in terms of possible entry-points for extension interventions, further training, or demonstration plot ideas.

Judging by these outputs from the PRAs in St. Lucia and Dominica, regional teams of EOs and farmers had begun collaborative problem solving. These activities were expected to continue as EOs incorporated strategies to address these local needs into their annual plans of work. Additional attention was to be given to the issues that lent themselves to demonstration plots in subsequent project components.

Table 5-8. Input constraints and causes from farmers' perspective-Dominica

Issues	Related Causes
1) High cost of Inputs	- Lack of finances to purchase inputs - Non-banana farmers must pay cash - No local manufacturing of inputs - Not enough use of compost - No subsidized inputs for non-banana farmers - Few companies importing inputs
2) Low Access to Inputs	- Only banana farmers can buy inputs - Fewer farmers cultivate bananas - Lack of knowledge of where to obtain inputs
3) Limited Availability of Inputs	- High dependence on imported fertilizers - No local manufacturing of inputs - Not enough use of compost - Stealing of inputs - Lack of knowledge of where to obtain inputs - Lack of planting materials - Not enough companies importing inputs
4) Inappropriate and Poor Quality of Inputs	- Fertilizers work on certain soils only - Poor quality damages crop - Causes leaf spot (bananas) - Inconsistency in quality - Lack of knowledge/technical advice on appropriate input use
5) Timeliness of Inputs	- Inputs not available from DBMC when needed
6) Distance of Input Outlets	- Lack of transportation - Poor road access - Time constraint in accessing inputs - No inputs available in the area

Source: Sullivan and Barham, 2002b

Demonstration Plots

Establishment of technology demonstration plots was among the project phases to follow the PRAs in St. Lucia and Dominica. Therefore, EOs were charged with identifying specific farmer identified constraints which could be addressed by FAO organized, EO directed, and farmer managed demonstration plots. Among the issues identified as suitable for demonstration plots in each country were:

St. Lucia

- Banana cultivation practices
- Yellow yam and tannia propagation and production methods
- Black pod and rodent damage in cocoa orchards
- Mites, whitefly and mildew on tomato and cucumber
- Establishment of high quality forage plots
- Water storage for vegetable and livestock producers

Source: Spring, Sullivan and Litow, 2000c

Dominica

- Borer control: Yams (NE, N); Plantain (SE, E); Cassava (SE, E)
 - Pest control: Vegetables (NW); White blight in carrots; White fly; Bacterial wilt
 - Control of Tannia burning (E, NE, NW)
 - Inappropriateness of available fertilizer across soil type and crops
 - Organic farming techniques: IPM; Composting (SE, E)
 - Ferro cement tanks to demonstrate water storage capabilities
 - Labour saving practices: Pre-emergent herbicides application techniques; Mulching; Plastic
 - Alternatives to commercial livestock feed
- Source: Sullivan and Barham, 2002a

While EOs identified possible demonstration plot themes, the project teams suggested overall guidelines for designing and undertaking such demonstrations. The guidelines suggested by the project team in Dominica focused on, (1) establishing demonstrations across the range of agro-ecological zones utilized by all farmers; (2) ensuring that all relevant stakeholders are recognized and incorporated with particular attention to female farmers; (3) demonstrations should be farmer led, managed, implemented, monitored, and evaluated; (4) on-farm trials should be based on group rather than individual responsibility; (5) EOs should facilitate rather than dominate the process, fostering mutual learning and responsibility; (6) monitoring and especially evaluation should be done by farmers, according to their own criteria for success. These recommendations were presented to EOs, MOA personnel and the FAO representative at the final workshop in Dominica.

Gender

Gender sensitivity, awareness, and analysis training was planned for and implemented by project teams in St. Lucia and Dominica. Beginning with the project teams' arrival in country and continuing throughout fieldwork and reporting, gender issues were given priority. In addition to gender disaggregated data from Round One and

facilitating women's participation in Round Two, EOs and the project staff alike were responsible for ensuring women's increased access to appropriate extension techniques and technologies. The project teams made their recommendations in various reports while EOs were expected to operationalize strategies in their plans of work, training exercises, and daily activities.

An indication that EOs had internalized the importance of recognizing and addressing gender issues emerged from one regional PRA report in Dominica. The report suggests that female farmers in the region had not received the same level of attention as their male counterparts. It further states that the PRA "created awareness of gender biases that exist," and the regional team committed to removing such biases from their program planning and subsequent execution of their work program (PRA Regional Report, Dominica, April 2002.)

Final reports from both PRAs suggested that local and institutional level change must occur for women to benefit from agricultural extension activities in St. Lucia and Dominica. At the local level, the project teams suggested increasing the number of female EOs as well as continuing to sensitize male EOs to gender aspects of agriculture and technology development and delivery. These claims are supported by similar findings in Grenada as Eckman suggested, "there is also a need to bring women farmers more fully into extension activities, and into the development process in general" (1998, p. 62).

While female farmers participated in the PRA in numbers representative of their proportion of 'farmers' in each country, there were questions over how a farmer is defined. Criteria for determining who is a farmer often include scale of production,

proportion of income derived from farming, or labor allocated to agricultural activities.

These criteria tend to exclude small-scale, semi-commercial, part-time farmers, many of whom are women, another finding supported by Eckman's PRA in Grenada (1998). ✓

Several EOs in Dominica recognized their own bias in this regard and began exploring strategies for recognizing and reaching female farmers they had missed in the past.

During both PRAs, EOs began to recognize the importance of gender as it related not only to their clientele (farmers), but that women dominated produce marketing and marketing decisions. ✓

As indicated previously in this chapter few women held positions of power within either MOA. In addition to the scarcity of women, MOA personnel were not well versed in gender, gender analysis, or its implications for livelihood security in St. Lucia and Dominica. This reflects, at least in part, the continuing assumption that agriculture is a male-dominated field. However, while men in both countries dominate administration and policy making, women contribute significantly to agricultural production and marketing. Project teams in both countries sought to use the PRA as a means to illustrate the roles of women in agriculture.

Summary

The project teams planned and delivered PRAs in St. Lucia and Dominica. They trained nearly 70 EOs and numerous MOA personnel in PRA methodology, participatory methods, and tools. Supported by MOA personnel and resources, EOs and the project team collaborated to include nearly 900 farmers in fieldwork, nearly 300 of whom were women. Outputs included synthesized and analyzed regional and national findings as well as various strategy reports and recommendations. In addition to written

deliverables, the projects enhanced EOs' ability to work with farmers to identify and address their needs. The project team increased EOs' capacity to recognize, synthesize, analyze and report the complex realities of farmers in each country.

In addition to specific outputs and deliverables from the PRAs in St. Lucia and Dominica, the project teams, the MOAs, and EOs collaborated to strengthen the relationship between farmers and EOs. Progress was made toward this goal as illustrated in one regional PRA report from Dominica. When asked how their region would reposition themselves to respond and assist farmers more effectively in the future, regional EOs suggested,

The PRA exercise has provided the Extension staff of this region with valuable information and skills, which will contribute significantly to increasing the effectiveness of Extension. At a time when the entire public service is under scrutiny, it is even more important that Extension assess its efficiency. The training in PRA methods and techniques could not have come at a better time. PRA Regional Report, Dominica, April 2002.

Farmers in St. Lucia and Dominica participated in a process (the PRAs) that encouraged them to share their goals and expectations with EOs differently than in the past. The expectation was that by doing so during the projects, their needs would be better met by the MOAs and EOs in the future. From this perspective, farmers were participants in the PRA and beneficiaries of the 18-month long projects. Findings and analysis are presented in Chapter 6; recommendations are presented in Chapter 7.

CHAPTER 6 FINDINGS

This chapter presents findings of the study. It is organized into three sections, each one corresponding to a research question. The first section explores the role and impact of context, as analyzed by gendered political ecology, on participatory agricultural development projects in St Lucia and Dominica. The second section summarizes the findings related to stakeholder participation in each phase of the study projects. The third section presents findings pertaining to multiple stakeholder interactions throughout the projects.

Both projects were successful for the genre (PRAs), meeting or exceeding all contractual obligations. Farmers identified and analyzed their most pressing needs, presented in Chapter 5. EOs gained insight into farmers' realities and collaborated to formulate strategies to address them. The MOAs got concrete strategies for addressing farmers' most pressing needs in addition to well-prepared frontline extension staff. The sponsoring agency received site-specific baseline data for use in future project components. As designed, the FAO project plans promoted the use of *techniques* capable of uncovering local realities. This approach led to increased understanding between farmers and EOs, but it made no explicit plans for power sharing by the MOA.

Figure 6-1 represents the five major stakeholders in the PRAs in St. Lucia and Dominica, and some of the factors that influenced their relationship to the project. In

addition, it shows the relationship of each stakeholder to each other as pertains to the projects. The factors surrounding farmers—off-farm employment, out-migration, input markets, output markets, and globalization—reflect key findings from the PRA fieldwork as presented in Chapter 5. It must be assumed that feedback loops exist between and among many of the factors presented here, particularly between the WTO ruling at the top of the figure, and globalization at the bottom.

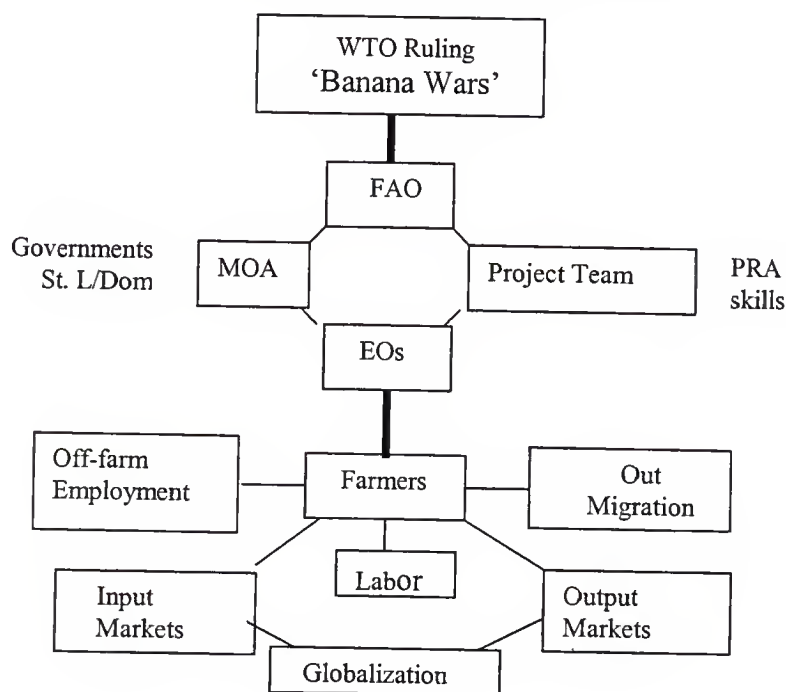


Figure 6-1. Relationships among stakeholders in PRAs

Findings

Research Question # 1: How did the confluence of political, economic, social and ecological factors in St. Lucia and Dominica contribute to the need for and implementation of the intervention?

Finding # 1

The intersection of historical, cultural, socioeconomic, political and ecological factors led to the study projects, affected their design and delivery, and will continue to influence the performance of the agricultural sectors in St. Lucia and Dominica.

Having relied on highly structured banana markets for the majority of their agricultural income for nearly fifty years, policy makers in both countries were trying to re-orient the sector while maintaining its viability. Yet neither country, at the time of the study projects, had clearly articulated goals for their agricultural sector in the face of globalization, free-markets, increased pressure on natural resources, and the need to conserve them. Tourism had replaced agriculture as the dominant economic sector in St. Lucia signaling a change in natural resource use priorities from production to preservation. Agriculture remained the dominant sector in Dominica, yet a fledgling eco-tourism industry and exploration and exploitation of mineral resources represented competing interests. ✓

In St. Lucia and Dominica, local ecological factors such as soil type, slope, land cover, altitude, and rainfall patterns impact natural resource use patterns. Farmers and their practices have evolved to exploit these conditions, surviving, profiting or losing as hurricanes, drought and disease cycle through their agro-ecosystems. Although they can be modified, existing natural resources will affect which agro-ecosystems prosper and/or which decline.

Cultural factors drive farmers' natural resource use patterns by influencing socially acceptable levels of consumption, household structure, gender relations, and access to and control of resources. These patterns have developed over hundreds of years and play an important role in setting the parameters within which change can or will happen.

Socioeconomic and political factors remain the major forces behind changing natural resource use patterns in St. Lucia and Dominica. Fixed natural resources, and

cultural influence on local behavior combine with relationships among local, national and international markets, to create the mosaic within which farmers survive. At the international level, both countries occupy similar positions in relation to external markets and policy-making bodies such as the IMF and World Bank. At the national level, St. Lucia has a more diversified economy than Dominica, providing alternatives to agricultural livelihoods.

Expansion of the tourism sector in St. Lucia has important ramifications for the agricultural sector. Many hotels and restaurants import food claiming that local produce is not of suitable quality or quantity for tourists. This is a market that farmers in St. Lucia should be able to capture, and the MOA has committed to helping them do so by establishing food quality standards and databases of market intelligence available to farmers. At the same time, tourism is increasing attention on aspects of environmental degradation caused by agriculture in the country including chemical runoff and erosion.

Finding # 2

The impacts of globalization reach beyond export markets for produce. In fact, they influence local realities as well. Among the influences of globalization within St. Lucia and Dominica were:

- Changing consumer preferences for imported foodstuffs leading to decreased consumption of locally grown staples such as plantains, root crops and fruits. ✓
- Limited access to, high cost, and unsuitability of agricultural inputs from foreign sources. National restrictions or import duties on these inputs made them unavailable to most farmers. In addition to limited availability, most inputs were produced elsewhere, limiting their appropriateness in St. Lucia and Dominica. ✓
- Difficulty securing wage laborers for agricultural work due to high wages expected by workers. Agricultural laborers had commanded relatively high wages during the height of banana production and were reluctant to accept ✓

- lower wages. Laborers also had other employment options, mainly in the service sector. Out-migration further reduced the pool of available labor.
- Pressures to adopt more environmentally sound practices to preserve the natural resource base for exploitation by the tourism sector. ✓

Therefore, in addition to globalization's external pressure on the agricultural sector, it caused internal pressure as well. Liberalized markets reduced the role of banana production, which in turn reduced household income, re-shaped communities, and reduced national export earnings. Markets for local produce began to shrink, inputs became more expensive and less appropriate because they were oriented toward banana production, and labor became more difficult to secure. Farmers faced pressure from all sides.

Finding # 3

With the goal of strengthening extension delivery services by increasing farmer participation, the projects were designed to help extension better meet farmer-identified needs. However, one of the characteristics of PRA is the unpredictability of outputs from conversations with farmers. Farmers frequently expressed their expectations of "the Ministry" or "the Government" to EOs during interviews. This led EOs to believe that many of the constraints they elicited were outside their control. Accustomed to a top-down system of agricultural extension, EOs in St. Lucia and Dominica had little training in securing markets for produce, seeking alternative sources of inputs, of increasing the efficiency of labor. Yet these emerged during fieldwork as some of farmers' most pressing needs. Farmers expected EOs (as part of the MOA) to address these needs, yet by themselves EOs had little power to do so. The project team recognized the need to break down these constraints and designed focus groups to allow EOs and farmers to analyze constraints in search of

actionable items at various levels. A major theme in designing and incorporating focus groups was empowering farmers and EOs to analyze constraints, recognize opportunities, and work together to address them.

An example emerged during one daily processing and sharing session in Dominica. The day's findings included a number of farmers who were victims of praedial larceny; their crops were being stolen from the field. Discussion between EOs revealed this to be a common problem in the area, and one they felt powerless to address. Further exploration revealed that busloads of tourists were being brought to the area and encouraged by drivers to sample the local produce out of farmers' fields. EOs agreed that this issue was outside the scope of their work until one of them suggested talking to the director of the bus drivers' union, a personal friend of his. Other EOs suggested that farmers and bus drivers could coordinate schedules allowing farmers to be in their fields to meet tourists, explain their fields and crops, and sell some of their produce. While anecdotal, this example illustrates connections between global and local factors, actors, and actions.

Finding # 4

Although necessary for understanding project impact in St. Lucia and Dominica, national-level policy and economic analysis proves insufficient; the influence of globalization must be recognized. Neither country ever produced solely for household or domestic consumption; both have been integrated into the global market since the arrival of the first European settlers. Farmers in St. Lucia and Dominica are producing within and for an increasingly competitive global market. Efficiency, niche marketing, production scheduling, value added, and strategic selling are skills and attributes that do not necessarily come naturally to all farmers,

particularly those accustomed to producing within a fairly structured and secure market system.

Prior to initiation of the FAO project, St. Lucia had begun re-orienting its agricultural sector by instituting land reform, and attempting to increase the economic efficiency of farmers. This left two critical issues un-addressed. The first was the overall goal of the agricultural sector. Was the goal of the sector food security at the household or national level, or was food security a goal at all? Was the agricultural sector's primary role to increase national export earnings or household incomes? These goals are not necessarily mutually exclusive, yet any one strategy or policy initiative is unlikely to achieve all of them simultaneously. Additionally, responses to these questions will affect different types of farmers differently.

The second issue was what to do with farmers who could not, or would not, change their livelihood strategies to meet market demands. In their desire to put agricultural lands, information, and technologies in the hands of more efficient farmers, what did the future hold in St. Lucia for small-scale, limited resource farmers whose resources were devoted to ensuring survival of the household? In addition to being a policy question, this issue had direct bearing on EOs' roles as the outreach arm of the MOA. Without clearly articulated targets for agricultural interventions, EOs were not sure which segment or tier of farmers to focus on, or how to meet the different needs of different types of farmers.

EOs in St. Lucia classified 93% of farmers interviewed during the PRA as either low (45%) or medium (48%) resource. The remaining 7% of farmers fit local criteria as high-resource farmers. Assuming this distribution is representative of the

farming population in St. Lucia, EOs would need technologies and approaches appropriate to three fairly distinct audiences if they were to reach all farmers in their country. Female farmers were scarcely represented among the wealthiest farmers in either St. Lucia or Dominica, and tended to be concentrated in the lower resource category. Given the emphasis put on gender issues during PRA training, fieldwork, and analysis, MOAs in both countries will need to develop strategies specifically designed to reach female farmers in the low and medium resource categories. In strategizing about how best to do this, EOs in Dominica realized their previous inattention to the poorest farmers in their regions, most of whom were women. ✓

The MOA in St. Lucia emphasized the economic aspects of farmer behavior as an important outcome of the PRA. Their focus was on natural resource use (agriculture and tourism) as an economic venture. Prior to project initiation, MOA efforts were underway to train farmers in record keeping and production scheduling techniques as a way to monitor nation-wide production scheduling. Their aim was to schedule production of vegetables, fruit crops, and livestock throughout the year to avoid gluts and shortages. The results were to be twofold (1) farmers themselves could plan—with MOA guidance—and produce on a schedule that ensured profit maximization and (2) local hotels, restaurants, and supermarkets could no longer justify importing produce based on inconsistent supply by local growers.

To promote economic viability of farmers after bananas, the MOA in St. Lucia had reoriented extension toward a commodity focus. EOs were becoming commodity specialists—livestock, cut flowers, green house vegetables, root crops, or fruit trees for example—focusing on particular crops (or livestock) rather than entire livelihood ✓

systems. Taken together these goals of the MOA indicated a national strategy for increasing farmers' ability to compete in the global market. They also contradicted project expectations that EOs would understand farmers' livelihood systems and strategies from a holistic perspective.

Although the role of agriculture in Dominica had changed little in comparison to that of St. Lucia since the beginning of the "banana wars" in the early 1990s, production, export earnings, and incomes had decreased. Rather than focusing on business aspects of farming, MOA policy sought to keep farmers farming, while looking to develop external markets to match existing agricultural production activities. Their intent was not to change the role of the agricultural sector, but rather to increase livelihood security for farmers across the board. However, the question of MOA goals and target audiences weighed on the minds of EOs in Dominica as they had in St. Lucia. Knowing they could not reach everyone or meet the entire range of farmer needs, EOs in Dominica were affected by lack of guidance and clear goals for their efforts.

The FAO projects focused EOs' attention on recognizing and responding to farmer identified technology and information gaps, which when addressed would increase farmer productivity and efficiency. However, the most frequently mentioned constraint by farmers in both St. Lucia and Dominica was secure markets for their produce. The projects were designed to help farmers increase productivity when they could not market what they were already producing. Therefore, it can be concluded that while agricultural performance in St. Lucia and Dominica was on the decline following the 'banana wars,' the perceived need for the FAO projects was based on

the assumption that encouraging farmers to diversify production away from bananas, which they were already doing, would be enough to improve their livelihood security.

This finding pertains to lack of clear goals for the agricultural sector.

Uncertainty begins with the role of agriculture in the national economy and is felt by EOs as they determine appropriate target audiences and goals.

Finding # 5

While implied throughout the previous findings, the perception of agriculture in St. Lucia and Dominica requires further exploration. The PRA may have been a more appropriate response to the decline in banana production and corresponding agricultural livelihoods in Dominica than St. Lucia. Of the two countries, Dominica relied more heavily on agriculture given fewer economic alternatives and less land pressure than in St. Lucia. A perceived lack of economic alternatives and the decline of the banana industry led to out migration high enough to create a negative population growth rate in Dominica. As suggested in Chapter 4, people in Dominica were farmers or closely enough related to one that only a limited domestic market for produce existed. Farmers in Dominica—across resource levels—were seen as the solution to revitalizing the agricultural sector, not the problem. Farming as an occupation or career was not stigmatized, and although concerned about declining numbers of young people entering the field, MOA and EOs recognized that young farmers had a presence in Dominica. ✓

Hand in hand with a positive perception of farmers, many EOs and MOA personnel were farmers in their own right, which did not create the conflict of interest associated with these dual roles as in St. Lucia. From this perspective, stakeholders in Dominica—EOs and MOA personnel—had different interests in the PRA than

their counterparts in St. Lucia. Instead of reducing the number of inefficient producers and increasing productivity by commercializing agriculture, they were interested in keeping people farming, producing what they knew they could and securing markets for their goods.

The project team eventually realized that the PRA in Dominica could not focus exclusively on Eos' increased understanding of farmers' livelihood systems and constraints. The challenge in Dominica was training EOs to work with farmers to find entry points for common solutions to farmer identified problems, especially in light of the St. Lucia experience where MOA cooperation was not guaranteed.

A related factor was a high level of professional and academic training in Dominica, particularly within the ranks of EOs. At least five of thirty-two EOs had graduate degrees and many more had at least two years of post-high school technical agricultural training. This was in addition to the agricultural curriculum taught in local high schools. If nothing else, this indicates both a national and a personal commitment to the field.

The project team was eventually introduced to the notion of informal cliques based upon where personnel had received their training. Almost all those in upper-level administrative positions in MOA were trained at the University of the West Indies (UWI). One high level administrator, the two veterinarians who participated in field work, and several EOs had been trained in Cuba. Another contingent had gotten graduate degrees in England. Although difficult to generalize, patterns of perspective and practice emerged according to which clique people belonged. By and large, UWI alumni were considered the 'old guard' and sought to deliver technical answers to

farmers' problems in a top-down manner. Those trained in Cuba had been exposed to a limited input, systems perspective of agriculture including principles and practices of organic farming and agricultural intensification. The English clique seemed more methods focused and was familiar with principles and practices of participatory agricultural development. A constant among all factions was their recognition that farmers in Dominica needed assistance from the MOA.

The FAO representative's characterization of EOs in Dominica as highly motivated was accurate from the perspective of the project team. As such, convincing EOs that participatory methods could put them on the same page as farmers was relatively easy. The need to do so, although introduced by the project team during training, was quickly internalized by factions of EOs who had been frustrated by lack of support by MOA administrators. The final selling point by the project team was that if done well, PRA could reorient EOs relationships with farmers with or without MOA support. More importantly, EOs and farmers did collaborate to identify, prioritize, and analyze constraints and develop plans for addressing them.

Summary

Reorienting extension to be more responsive to farmer needs by introducing participatory methods was the primary goal of the projects. In the event that upper-level decision makers, including those at the policy level, do not understand the complex realities facing farmers on the ground, this approach can illuminate existing conditions and identify entry points for development interventions. However, increased understanding at upper-levels does not guarantee that these levels can or will respond to farmers' needs. St. Lucia and Dominica offer rich examples of farmer constraints (markets, access to and quality of inputs, and labor availability), caused or

exacerbated by factors largely outside the control of MOA or other national level institutions. As such, constraints and solutions derived from fieldwork in the two study projects were likely short-term in nature and occupied a narrow margin on the edge of the current global reality.

Factors beyond farmers' control limited their options for modifying their livelihoods. Employment options outside agriculture were limited, even in more industrial St. Lucia, and out-migration was an attractive option in both countries. Within agriculture, farmers had difficulty competing with producers in other Caribbean countries, Latin America and the United States in terms of price, quantity and quality. Agricultural production costs in St. Lucia and Dominica were comparatively high due to import duty on inputs and the high cost of labor stemming from the days of banana production when laborers began commanding high daily wages. Given the predominance of small-scale producers, individual farmers in St. Lucia and Dominica could rarely produce quantities sufficient to meet exporters' demands and few functioning farmers' organizations existed, although this was a point of interest for FAO and MOA. MOA in St. Lucia had established quality standards for exportable produce, but farmers were not accustomed to meeting them. A similar system of quality control was being initiated in Dominica when the project team arrived in Dominica in February 2002.

Few of the challenges facing farmers in St. Lucia and Dominica in the twenty-first century will be addressed by a closer relationship with extension alone. Therefore in addition to region-specific items to be incorporated into Extension plans of work, the project team was responsible for policy recommendations to address

issues outside the influence of EOs and farmers. This task was complicated by delineating lines between stakeholder responsibilities and illustrated the interconnectedness between factors affecting conditions on farms, in households, within geographic regions and at the national level. In this way, the FAO projects were on target; by design they recognized that all stakeholders had to become actors to address the issues facing farmers in the St. Lucia and Dominica. However, they did not address how all actors should work together.

Research Question # 2: Who were the stakeholders in each project and how did they participate in the different phases?

FAO project plans for the PRA specified major stakeholder groups in St. Lucia and Dominica and gave the project team the bulk of decision-making authority in terms of who participated, when, how, and why. The team consulted and collaborated with farmers, EOs, MOA personnel, and the FAO representative to varying degrees across and within project phases in both countries.

Stakeholders in the study projects were identified in Chapter 5: farmers; EOs; the MOA; the project team; and the FAO representative. As indicated earlier, this list is not an exhaustive accounting of those affecting or affected by the study projects in St. Lucia and Dominica. For example, both countries have National Marketing Boards, Banana Grower Associations, farmer organizations, regional associations, and rural development programs among others who were identified during project planning and preparation as possible stakeholders. However, these stakeholder groups had little if any role in decision-making regarding PRA planning and implementation in St. Lucia and Dominica. As such, the original list of stakeholders encompasses those actors who dominated activities during the projects. Findings

related to this research question are framed by the project analysis framework indicating decision-making during each phase of the projects.

Training

According to Terms of Agreement, the project team was responsible for training EOs in participatory methods and tools. With guidance from the project plans and terms of agreement, the project teams created training designs for both projects before departing Florida. Both were refined in consultation with MOA, EOs and farmers in St. Lucia and Dominica. By design, the project team retained decision-making authority during training and fieldwork in St. Lucia and Dominica. The goal of both training programs was to equip EOs to understand farmers better. In this way, EO participation in training was instrumental to project success; it was necessary for efficient project delivery.

Having benefited from experience in St. Lucia, the project team in Dominica conceptualized EOs participation in training somewhat differently. In addition to EOs' role in data collection, emphasis was put on increasing their ability to work toward solutions with farmers. Not only were EOs trained to capture farmers' reality during Round One interviews, they were trained to respond.

Figure 6-2 compares stakeholder participation in training in St. Lucia to Dominica. The biggest difference is reflected in the relative role of the MOA that was greater in St. Lucia than in Dominica. The MOA in St. Lucia had a greater physical presence during training with high staff participation. MOA personnel also served as trainers during the workshop. Their participation was sustained throughout fieldwork and the final phases of the project, suggesting their interest in findings and

outcomes. MOA participation in training in Dominica was limited to a presence at the opening and closing sessions.

Several factors led to EOs increased role in training in Dominica. Many EOs had advanced degrees and academic training in theories and tools for incorporating participation in development. As such, they contributed suggestions to the training design and sessions. In addition EOs seemed to respond to the lack of MOA participation by committing themselves to full participation and collaborative learning with their colleagues. The project team encouraged the FAO representative to increase his participation in the training program in Dominica, and he did so willingly.

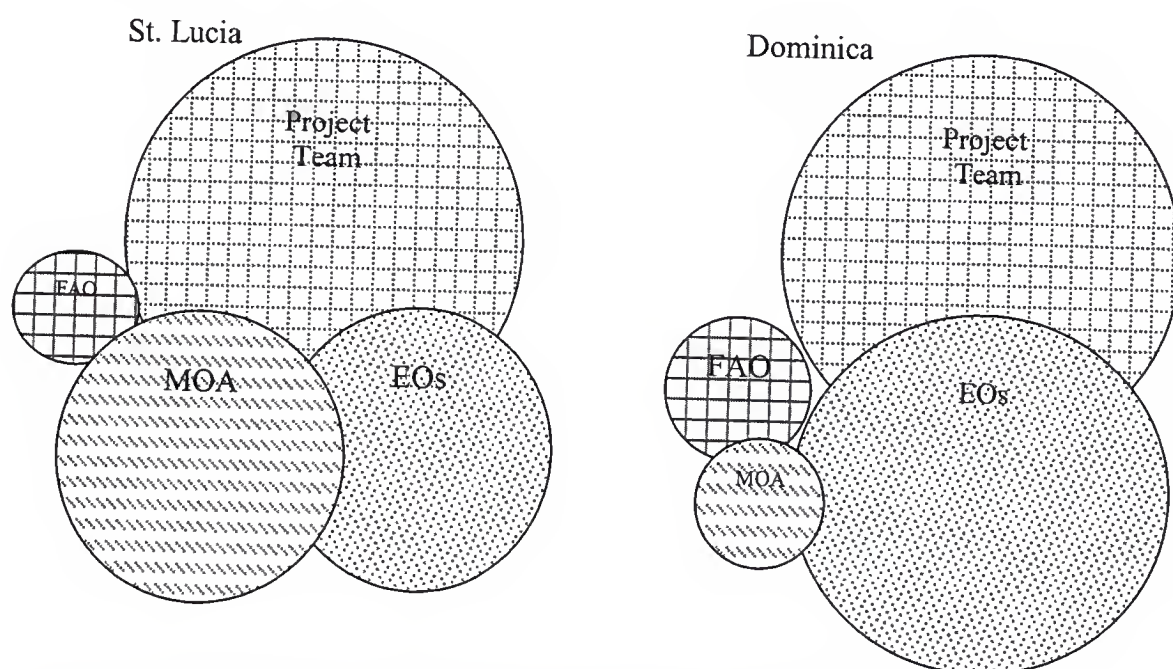


Figure 6-2. Relationships among Direct Stakeholders in Training Programs.

PRA/Fieldwork

The project team began sharing decision making with EOs during this phase of both projects. EOs determined which farmers to interview, when and where. Farmer interviews in St. Lucia fostered representative participation by EOs because they

chose which tools and techniques to use in data collection. Equipped with a toolbox during training, EOs in St. Lucia decided how to proceed with data collection during farmer interviews. This was not the case in Dominica where the project team had taken these decisions out of EOs' hands during project planning and training. EOs participation during Round One farmer interviews was instrumental and used as a means to an end. Farmer participation in Round One of field work (interviews) can be seen as nominal in each project. Although farmers engaged in dialogue with EOs, other stakeholders had dictated farmers' participation in this round.

As conceived by the project team in St. Lucia, focus groups sought to bring farmers into decision-making processes. The project team wanted farmers to move from sources of information (means to an end) to actors with a voice. This meant that EOs had to take on new roles as well, those of facilitators and mediators. EOs became facilitators at the 'top' with farmers as participants at the 'bottom.' EOs were empowered to encourage farmer participation and share some of their decision-making responsibility with farmers, fostering representative participation. Due to a number of factors including better preparation by the project team and political ecology factors, this effort was better received in Dominica than in St. Lucia.

Data synthesis and analysis

Data organization, synthesis, and analysis were the ultimate responsibility of the project team, thus it is difficult to analyze this phase in terms of participation. At this stage the project team, the FAO representative and regional teams of EOs had the greatest stake; farmers were no longer among the actors in the process. The project team and EOs had similar interests, meeting reporting requirements. Nonetheless the

project team retained responsibility and dictated instrumental participation by EOs as a means of efficiency.

Having encouraged EOs to foster representative participation with farmers during focus groups, reverting to a proscribed process of data synthesis and analysis explains some of the difficulties encountered in this phase. EOs in both projects had expanded their understanding of farmers' realities during fieldwork, but were instructed to report results within a fairly rigid framework provided by the 'top.'

Final presentation

By project design, MOA personnel and the FAO representative had limited participation in the fieldwork or data synthesis and analysis phases.¹ Those phases were the responsibility of the project team and EOs. Therefore, the final phase of both projects represented an opportunity for major stakeholders (except farmers) to come to the table. For the project team, this phase was among their final responsibilities. However, for the MOA and FAO representative it was their first indication of results from the fieldwork, and they along with EOs, began formulating their responses. The presentation of results also signaled the beginning of subsequent project components.

While the project team retained responsibility for this phase in St. Lucia and Dominica, MOA personnel and the FAO representative increased their decision-making at this point. This is a logical response given their investment in the projects and interest in outcomes. In fact, a shift in power must happen at this point, but who gets it and who decides?

¹ MOA personnel in St. Lucia participated in the PRA more than their counterparts in Dominica. However, their participation was limited to a few personnel, mostly during farmer interviews.

The MOA, FAO representative, project team, and EOs all had vested interests in project outcomes, and they emerged during this phase in both projects. In St. Lucia and Dominica, MOA personnel were interested in the profile(s) of the agricultural sector attained during fieldwork. The FAO representative sought synthesized regional and national level outputs with particular attention to actionable items appropriate for subsequent project components. First and foremost he expected regional PRA findings in a format that could be converted into regional plans of work. He also expected synthesized and analyzed national level data.

Different stakeholder participation in the two projects manifested itself in this phase. In St. Lucia, the MOA's presence throughout the PRA meant that certain personnel had a clear understanding of regional and national results. This allowed the MOA to begin identifying targets and formulating responses. It can be suggested that certain MOA personnel had a more clear understanding of the implications of the PRA than many EOs. In Dominica that balance was reversed. There, EOs were positioned to identify targets and develop implementation strategies while the MOA sought targets and concrete tasks from the project team. The MOA in Dominica did not recognize that the information they sought from the project team resided with their own EOs.

Research Question # 3: How did interactions within and between several stakeholder groups affect outcomes of each of the participatory development projects in this study?

It is necessary to address the project team's relationships with stakeholders in each project. With the project team at the center of decision-making in project planning and implementation, other stakeholder groups fell into roles of relative

importance. In the language of participation, these roles can be characterized as consultative, collaborative, or collegial, depending on the nature of interactions between the groups (Chambers, 1997; Lilja & Ashby, 1999; Pretty, 1995).

Consultative participation by stakeholders with the project team relegates the former to answering questions posed by the latter; i.e., their input is limited by the questions asked by the project team. Collaborative participation suggests that the project team collaborated with other stakeholders at certain points in project implementation, sharing a certain amount of authority. Collegial participation indicates a more equitable distribution of input and decision-making authority between stakeholder groups.

Finding # 1

The project team's actions within the projects relegated other stakeholder groups to consultative and collaborative participation according to their obligations to FAO. While focus groups during Round Two of fieldwork were designed to create a collegial relationship between farmers and EOs, it was the latter's power that was at stake in this arrangement, not that of the project team.

An indication of stakeholder influence on outcomes can be represented as with which stakeholders the project team most closely aligned themselves. Figure 6-3 compares the relative influence of stakeholders on the project team's overall decision-making in terms of project planning and implementation in St. Lucia and Dominica. The most prominent lines between the project team and stakeholder groups represent greater relative influence; the thicker the line, the greater the influence. The figure suggests that farmers and MOA had the greatest influence on the project team's

decision-making in St. Lucia while EOs and the FAO representative were most influential in Dominica.

In St. Lucia, the project team considered farmers primary stakeholders in the project, and sought to meet project outcomes by immersing EOs in farmers' realities. Farmers' influence, although anonymous, manifests itself in the project team's goal of putting EOs in farmers' shoes. In this case, the 'bottom' would drive change.

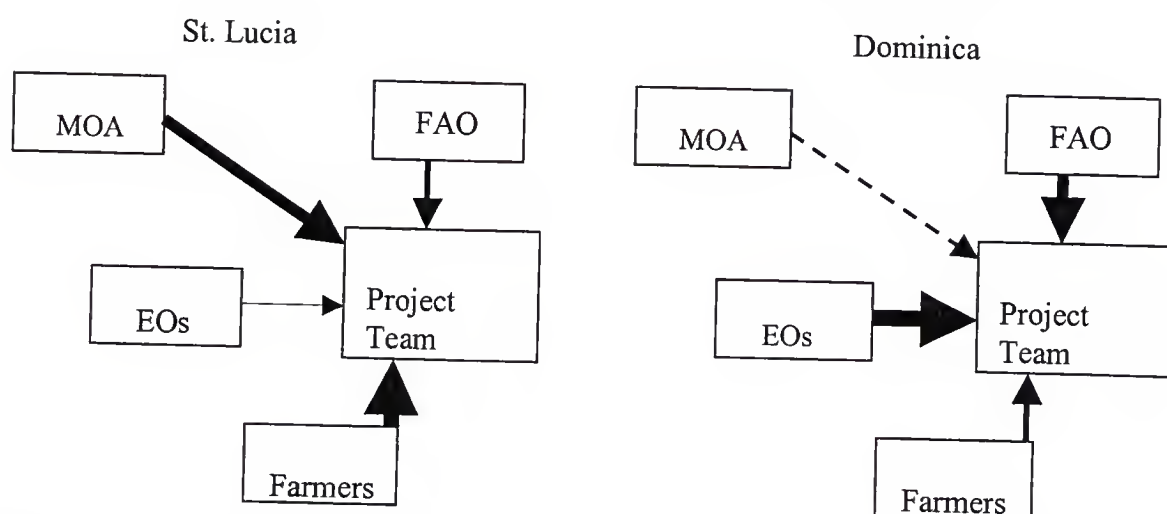


Figure 6-3. Relative Stakeholder Influence on Project Team Decision Making in St. Lucia and Dominica.

The second greatest influence on the project team in St. Lucia was accorded to MOA. This was due in part to participation in all project phases by the Chief Agricultural Planning Officer, whom the project team considered a colleague. The influence of the FAO representative was limited throughout planning, training, fieldwork and data synthesis. During the final project phase, the project team and the FAO representative spent considerable time clarifying expectations and illustrating how results matched or exceeded them.

The relegation of EOs to the least influential stakeholders is an interesting result of stakeholder analysis in St. Lucia. While the project team considered farmers the primary stakeholders, the interests of the actual change agents were secondary through most of the project. This may have left EOs with little incentive to buy in to long-term project goals.

In re-examining the St. Lucia project in preparation for Dominica, the project team recognized the incongruence of the relative influence of farmers and EOs. Farmers, not EOs, had been identified as the target audience in the first project. The schematic on the right in Figure 6-2 reflects the reorientation of efforts in Dominica where EOs replaced farmers as primary stakeholders. Rather than focusing on farmers' realities, the project team planned the Dominica project around the realities of EOs.

The second most influential stakeholder in Dominica was the FAO representative. This status reflects the project team's desire to incorporate his expectations into the process and ensure successful collaboration throughout final project phases. Despite this elevation as an influential stakeholder, similar questions about expectations arose in Dominica as had arisen in St. Lucia. Farmers' diminished influence in Dominica did not imply that the project team ignored them. Rather, it reflected the project team's intent to empower EOs to change their relationship with farmers as they saw fit.

Finding # 2

FAO planned the development projects in St. Lucia and Dominica around increasing farmer participation. They suggested that improving the relationship between EOs and farmers could lead to strengthening the agricultural sectors in both

countries. This would be done by training EOs to pay more attention to farmers' perspectives and incorporating them into program planning. The MOAs in St. Lucia and Dominica agreed to the approach and the projects, and in doing so offered up their EOs and farmers as participants. This was a top-down approach to incorporating participation because the MOAs, FAO and the project team told EOs they would participate, and how. EOs were trained to tell farmers that *they* would participate, and how.

From this perspective, the most influential short-term stakeholder in both projects was the FAO representative. Having expressed his expectations to the project team and EOs during project planning and training, his absence from fieldwork and data synthesis and analysis left him unsure of results and outputs. During the final wrap up in Dominica, the project team encouraged the FAO representative to communicate his expectations directly to EOs and work with them to achieve desired results. This strategy allowed the project team and EOs alike to realize that even the stakeholder with ultimate responsibility for reaching project goals was unsure of the best way to use participation to meet them.

Farmers participated in both projects by sharing their stories and by strategizing with other farmers and EOs to find realistic solutions to their most pressing needs. However, many cited previous inattention by MOA for remaining somewhat skeptical of this new effort at collaboration. The sentiment, expressed as survey fatigue, was most frequently voiced as, "what ever happened with the information we gave you last time?" While amenable to MOA attention, farmers wanted results and were not always pleased to realize that increased collaboration with EOs shifted some

responsibility to them. Farmers had little difficulty voicing, prioritizing, and analyzing their constraints. They did, however, question whether they could count on MOA and EOs to follow through on mutually derived solutions. Inasmuch as farmers' issues appeared in regional reports they may have been incorporated into regional extension plans of work after the PRA, and acted upon.

Finding # 3

The second finding pertaining to stakeholder interaction suggests that successful implementation of PRAs does not guarantee empowerment. As mentioned earlier in this chapter, the PRAs in St. Lucia and Dominica were successful because they met or exceeded project requirements. This does not imply that either of them empowered farmers or EOs, even though these were long-range project goals. Nor does it imply that no farmers or EOs were empowered. It implies that empowerment is multi-dimensional with short- and long-term ramifications and depends on continued stakeholder interaction and participation. This supports Cleaver's point that empowerment has been watered down by its chronic association with participation (1999). Development practitioners have come to assume that increasing participation automatically increases empowerment. This is not always the case. This study reflects only the information obtained during the initial project components, and cannot assess long-term outcomes.

The PRAs in St. Lucia and Dominica increased EOs' and farmers' capacities to collaborate in problem identification, opportunities for advancement, entry points for interventions, and strategies for addressing farmer identified needs as presented in Chapter 5. However, this capacity building was done, first and foremost, to meet short-term goals, and did not guarantee that either farmers or EOs were empowered.

EOs capacity to dialogue with farmers and work toward mutually acceptable solutions was enhanced during the PRAs. Community action plans, facilitated by EOs, was an output of both PRAs. These plans were expected to be incorporated into regional extension plans, toward which EOs targeted their activities.

Finding # 4

The projects were designed to identify and prioritize farmers' immediate needs, (see Tables 5-5 and 5-6, and 5-7 for examples). Long-term change from participation depends on willingness of more powerful stakeholders to share their power. Without a framework within which stakeholders can move from identifying symptoms to working together to address causes, results will remain short-term. While the project team imposed such a framework on EOs and farmers during focus groups, without MOA involvement and commitment to sharing power and acting on outputs, the effort remained local and short-term in scope.

The approach in Dominica centered on EOs exploring their own power, vis-à-vis MOA in particular. Their desire to have more voice in their relationship with those above them was easily transferable into giving farmers voice. EOs saw the benefits of sharing their power with farmers; they could all be more successful. By sharing power with farmers, EOs in Dominica no longer bore sole responsibility for addressing their needs. In addition to a different approach to the projects by the project team, this difference reflects the close relationship between Dominicans in general, and EOs and farmers in particular.

An associated element of power and participation is who decides? The projects in this study were meant to expand the list of decision-makers in delivering extension services to farmers. As suggested in the project plans a system of decision-making

exclusive of intended beneficiaries does not address their needs. While not meant to completely reverse the process, PRAs were designed to add farmers to the list of who decides. In St. Lucia, the project team tried to put farmers near the top of the list, in Dominica they empowered EOs to decide how best to incorporate farmers into decision-making.

In both countries, EOs' capacity to identify and articulate farmers' needs to researchers and policy makers was enhanced by participation in the PRAs. EOs practiced using tools for differentiating between farmers according to gender, enterprise type, resource levels, and scope of production, which can help them prioritize issues to be addressed. EOs also engaged in collaborative problem solving with farmers, and each other. It is safe to say the EOs were empowered by their participation in the PRAs, and emerged better prepared to lead the change in their agencies treatment of farmers.

Finding # 5

A last finding on interactions within and between stakeholder groups in participatory development projects is their dynamic nature. While FAO's 18-month long projects to improve extension delivery were meant to benefit farmers, communities and national-level stakeholders, the PRA component of each project was actually designed to empower EOs. Results of the PRAs were incorporated into regional extension plans of work, and were meant to reflect their deeper understanding of farmers' lives and livelihoods derived from fieldwork. In this way, farmers would benefit from improved extension delivery. Assuming that regional extension teams in St. Lucia and Dominica incorporated farmer identified needs and opportunities into their plans of work, the results would need to be examined for the

next set of constraints facing farmers. Farmers' and Eos' stakes in participation would constantly change.

Increased participation by any stakeholder impacts those nearest to them in the hierarchy of decision-making. Each farmer interview, focus group meeting, and day-end processing session added to EOs' and MOA personnel's understanding of the situation. No single stakeholder group in these projects controlled all the information or facilitated all of its dissemination. At the very least, each group left the project with a better understanding of interests of the others. As this knowledge was gained and shared, stakeholder perceptions and expectations changed.

Summary

This study set out to explore, analyze and draw conclusions about the processes of designing and delivering participatory development projects. As such, it addressed Cleaver's criticism (1999) of the recent reduction of participation to a series of tools and techniques delivered in power-neutral and apolitical situations.

Findings related to the first research question showed that while participation may be useful for solving local-level problems, few of the constraints faced by farmers in St. Lucia and Dominica were entirely local. Therefore, participation must be situated within the larger reality of stakeholders. While counter-intuitive, participation must be framed and planned such that stakeholders work toward feasible solutions. Increasing St. Lucian and Dominican farmers' production of traditional crops when they cannot market current produce is not a feasible solution.

The second research question generated findings related to processes of designing and implementing participatory development projects, paying particular attention to stakeholder participation at each phase of the projects. This analysis

revealed that not all participation is created equal and that stakeholders engage in different forms or types of participation throughout the life of a project (White, 2000). Each distinct project phase involved different participation by a different combination of stakeholder groups, quickly complicating a seemingly straightforward project.

The third research question generated findings about interactions between stakeholder groups and focused on issues of influence and power. Participation is political and can be seen as threatening existing power structures. Empowerment of one stakeholder group is often seen as coming at the expense of another. Therefore, the more powerful the stakeholder group, the more they stand to lose.

Besides failing to address St. Lucia and Dominica's position within regional and global economies, the study projects implied that participation would improve the situation without specifying why participation, what type, by whom, or how. This left defining participation and deciding how best to achieve it open to interpretation by key stakeholder groups. It also ignored the issues of power inherent in increasing the participation of one group of stakeholders without preparing others for the change. In particular this study addressed Cleaver's call for analysis of participatory projects by documenting processes, conflict, consensus building and decision-making (1999).

CHAPTER 7

CONCLUSIONS AND RECOMMENDATIONS

This chapter presents conclusions related to research findings found in Chapters 5 and 6. Conclusions pertain to project design and project delivery, and are followed by recommendations for designing and implementing participatory development projects.

This study began as a search for greater understanding of factors that influenced two participatory development projects in the Caribbean. The research questions and objectives were designed to illuminate as many of these factors as possible, and establish relationships between them. This research used an adapted gendered political ecology framework to analyze and compare the context and processes of each project. This approach allowed for simultaneous examination of stakeholder interactions against a backdrop of ecological, socioeconomic, political and historical factors.

The projects analyzed in this study ascribed the role of participants to farmers and frontline extension officers (EOs). In addition to being a top-down approach to incorporating participation, this decision placed the burden of change on these same stakeholders. While placing the burden for change on them may imply that these two groups could change the situation, this is not the case. Farmers in St. Lucia and Dominica currently operate within a narrow range of agricultural options, facing challenges they did not create. Globalization, shifting populations, economic reform and ecologically sensitive environments dictate many of their options, while their choices reflect gender issues, increased labor costs, and decreased local demand for their produce.

Encouraging them to prioritize their constraints and work toward solutions with EOs is the first step in a process that requires higher-level institutional support.

Project Design

There are difficulties associated with designing participatory projects that are inherently power-based (Chambers, 1997; Guijt & Shah, 1998; Pritchett & Woolcock, 2004). Farmers were identified as the ultimate beneficiaries of improved extension delivery services, and the change was predicated on their participation with EOs. It also depended on EOs' participation in the PRAs designed to reorient their approach to communicating and working with farmers. Assumptions inherent in this approach included farmers' desire to participate any differently than they had in the past—for no guaranteed gain, and EOs' desire to reposition themselves vis-à-vis farmers with no guaranteed institutional support.

The projects were designed to identify and address local needs. However, many of the local needs identified by farmers—product markets, access to inputs, and labor—had root causes that were transnational, if not global in nature. In this way, country-specific gendered political ecology and power structures were not obviously incorporated into project design. The projects were successful. They met expected outcomes and exceeded others in a very short time, while laying the groundwork for ongoing efforts. Yet, successful project implementation and results were no guarantee of sustainable, long-term change in relationships between farmers and EOs.

The projects sought to reorient or enhance, not reduce, EOs' relationships with farmers. Farmers could still expect EOs to secure planting material, advise them on crop scheduling, or treat diseases in their livestock. In addition, they could expect EOs to guide them in farmer group formation, record keeping, and strategic planning for their

farms. As a result of the PRAs, a short-term focus (addressing symptoms) was to give way to long-term planning (addressing causes). In return, farmers were expected to respond to EOs more as partners and less as sources of inputs. The rationale behind changing these roles as well as the mechanisms for doing so was not devised by farmers or EOs. Rather, they were transferred to EOs to be delivered to farmers like previous top-down extension strategies.

Because farmers and EOs were key stakeholders in the participatory projects, the process was considered to be empowering. And farmers and EOs were empowered. Both groups were encouraged to step out of their customary roles and recognize that together they had the power to implement change. In addition, several post-PRA project components held potential for continued collaboration between farmers and EOs.

According to Schmink, the confluence of factors indicated by gendered political ecology enhances or inhibits efforts at participatory development (1999). In the study projects, the reality of limitations placed on farmers by these factors likely reduced the probability of long-term change. Constraints analysis conducted during focus groups revealed the complexity of factors facing farmers and the EOs who were trying to secure the farmers' livelihoods. Increasing crop production when local markets are already flooded and international markets are increasingly competitive will not increase farmers' livelihood security. On the other hand, encouraging farmers to produce for niche markets that may or may not materialize has risks as well.

Project Implementation

Increasing farmer participation in their own needs assessment and strengthening their relationships with EOs is a positive approach to reversing top-down initiatives. However, short-term approaches to long-term situations can raise stakeholder

expectations, and cause them to lose faith in the process (Chambers, 1997). Change that originates at the grass roots level must be accompanied by institutional change to ensure sustainability.

EOs' primary role in fieldwork was data collection and analysis. They were charged with understanding farmers' realities and collaborating with them to develop and plan for implementation of solutions to their most pressing needs. EOs met these goals. Farmer constraints were elicited, explored, and turned into action items for EOs to incorporate into subsequent annual plans of work. At this level, between EOs and farmers, there was ample evidence of collaborative problem solving.

During the course of focus groups, issues arose that EOs felt they could not address without MOA support. These issues typically involved resources such soil test kits, irrigation technologies, appropriate planting materials, heavy equipment for road grading, or funds for organizing farmer field days. Having worked with farmers to establish priorities and develop action plans to address them, EOs expected additional institutional support for their new roles.

The project team in Dominica sought to prepare the MOA for the types of outputs likely to emerge from the PRAs, including institutional support EOs might require to increase the likelihood of long-term change. However, MOA personnel in Dominica were not as involved in the PRA as their counterparts in St. Lucia. EOs and the project team saw an opportunity in the situation; for results to persist after the project had ended, it had to be driven and facilitated by EOs. In Dominica project team addressed EOs as the target audience and primary stakeholders throughout the project. As the PRA evolved, EOs and the project team suspected EOs would garner more support from a

closer relationship with farmers than they could recognize from their own institution.

EOs approached their roles as facilitators from the perspective that few resources from the MOA would be devoted to the activities they designed with farmers.

In neither project were MOA interests well understood or well represented. This is understandable considering most stakeholders' lack of familiarity with implementing participatory approaches. Like EOs and farmers, MOA personnel had limited experience with the kinds of reversals and shifting roles associated with increased stakeholder participation. As stakeholders supporting the PRAs, MOA personnel did not consider themselves participants, because as designed the PRAs focused on farmers and EOs. While both MOAs devoted considerable resources to the projects, there was sense that there was no clear place for their personnel to participate. The Chief Agricultural Planning Officer in St. Lucia created that space for six of her staff members who participated in Round One interviews. This expressed her willingness to commit her unit to understanding project outputs.

EOs in both countries perceived lack of MOA participation as a lack of commitment to their efforts. Combined with farmer skepticism (during Round One) about another project that would take their time and offer no return, EOs would have been justified questioning the process. Round Two signified a shift in procedures, roles and goals for EOs and farmers alike. While Round One resembled previous surveys of agricultural populations, focus group activities were unique to most participants. As designed, focus group meetings called for EOs to act as facilitators, seeking to clarify and understand farmers' issues from a slightly different viewpoint. Most EOs and farmers

responded positively to this change in roles, so much so that many groups asked to continue the format for dealing with future issues.

As Cleaver (1999), Guijt and Shah (1998) and White (2000) point out, participation is inherently power based. Expanding the participation or role of one group is likely to impact the groups around them. Enabling EOs and farmers to form a collegial relationship will impact existing power structures. If as suggested in the project plans, extension was to become more responsive to farmer needs, just how were EOs to respond? EOs began answering that question with the help of farmers during Round Two. Collaborative problem solving led farmers and EOs to devise individual and group action plans to address some of the farmers' most pressing needs.

The project teams planned and oversaw PRAs that generated increased farmer participation in extension program planning by equipping EOs with tools to keep farmers engaged in the process. A parallel exercise with MOA personnel could have been beneficial. Once they became familiar with the process and results, EOs in both countries suggested conducting PRAs of their extension staff in order to elicit the constraints they faced in doing their jobs. Although light-hearted, the suggestion began to resonate when farmer and EO action items were abandoned for lack of MOA support.

The setting influences the potential of participation. While the rationale behind incorporating participation, the types of stakeholders, and goals may be similar from project to project, how best to achieve sustainable results depends on the reality on the ground. All participation is not good all of the time. Context—gendered political ecology—in St. Lucia and Dominica impacted stakeholders' ability, willingness and interest in participating in the study projects, as well as the results of their participation.

Taken in combination, these factors enhanced the potential for participatory agricultural development by creating the need for new strategies from farms to Government House. Stakeholders at all levels felt a need for change, and although not all shared the same approach, they were committed to making it happen. On the other hand, these same factors constrained the potential for participatory development by recreating historical patterns of roles, goals and responsibilities not easily changed. With short-term focus on farmers and EOs, the projects could not address their needs that were linked to national and international actors and stages. Given St. Lucia's stronger ties to the global economy, participatory development was less effective than in Dominica where less integration increased the viability of local solutions.

Recommendations

For advocates of participation, proscribing it or limiting it seems to compromise the integrity of the approach. On the empowerment end of the *theoretical* scale, participation leads to reversals of power, a redistribution of decision-making authority, and increased autonomy for traditionally less-powerful groups. Evidence of such endeavors is scarce, and for good reason. Participation does not, and cannot happen in situations devoid of power or politics. For these reasons the first recommendation emerging from this study is that participation needs to be planned for if the intended outcomes impact other stakeholders, which by definition they do. Stakeholders with power rarely surrender it simply because another has asked them to do so.

Planning for Participation

Planning for participation, whether advocated as a means to an end, or an end in and of itself, must be situated within the multi-dimensional realities of stakeholder

groups. Historical, political, socioeconomic, cultural, and ecological factors must be acknowledged, understood, and accounted for because *in addition to shaping existing conditions, they influence the range of possible outcomes*. Increasing participation in agricultural development in the early twenty-first century requires particular attention to limitations and constraints imposed by external factors. While in-depth gendered political ecology analysis may not always be feasible, a certain level of understanding is necessary for determining if participation is even an appropriate approach.

Participatory approaches to development were originally designed to respond to needs of communities, be flexible according to participants' time and needs, give participants tools to analyze their own situation, and empower local communities leading to action (Spring, 2000). Acquiring richer data or more accurate needs assessment does not fit these definitions. However, when those data are returned to stakeholders for clarification, validation, analysis, and generation of action items, they become participatory.

In terms of participation, there is no one 'best' approach. In fact, what constitutes the most 'appropriate' form of participation should be based upon desired outputs or goals of stakeholders including sponsoring agencies, collaborators *and* intended beneficiaries. There is no reason to suspect that every situation needs genuine participation to reach satisfactory outputs, or that every opportunity for participation must result in large groups of empowered farmers. But participatory projects should be planned with an eye toward feasible outcomes that can be implemented.

Excluding sponsors or government institutions from the list of stakeholders in participatory agricultural development efforts puts the burden of change completely on

the ‘intended beneficiaries.’ This leads back to the issue of participation in isolation where the likelihood that locally derived solutions will be constrained by institutional factors may be high. As seen in St. Lucia and Dominica, farmers and EOs can engage in representative participation, taking ownership of parts of the process, but be stymied when further action requires MOA support. Sponsors’ and institutions’ relative positions of power should not prohibit them from engaging in the participatory development efforts they design and approve. In fact, it gives them even more reason to engage in the process.

Participation in development should be approached from a systematic perspective, following a logical framework. Simply advocating participation resembles similar approaches to incorporating gender issues or poverty alleviation. Participation, gender and poverty can be seen as lenses through which the more powerful examine the less powerful and their characteristics without subjecting themselves to the same scrutiny. Participation should not be expected to lead to empowerment of a target audience if others in the project chain do not also engage in reflection, collaboration, power sharing or two-way communication. This is analogous to entities that expect their staff to address gender issues on the ground, without ever acknowledging its impact within the organization itself.

The decision whether or not to incorporate participation in development projects must be examined critically. While it is not a linear process, the entry point into “planned” participation begins with a fundamental question: how will participation contribute to meeting desired outcomes? ‘Is participation necessary?’ is not a question often posed in development projects. As an assumed good, participation is often written

into projects without a clear understanding of *why*, or more importantly *how* it will help reach intended outcomes. Planners must articulate why participation is an appropriate approach to meeting stated objectives. *Why* participation does not imply good or bad approaches, only that some may be more appropriate for meeting goals than others. This question can also be posed as which type or form of participation is most appropriate to meeting stated goals? Why participation? can only be answered after consideration by those planning the intervention, and must relate directly to desired outputs or goals. Starting with the end in mind may seem a counterintuitive approach to participation but it is necessary. This step can be summarized as a simple decision tree: participation, yes or no? If no, do not advocate participation.

If targets are best met by incorporating some type of participation, then what type is most appropriate? If a project to inoculate a population requires them to participate by showing up and being inoculated, then that approach to participation (nominal according to White, 2000)) is appropriate to desired outcomes. On the other hand, if farmers and EOs are expected to reposition themselves in relation to each other, set priorities, and act on them, then representative participation can be planned to empower both EOs and farmers, giving them voice and leverage in decision making.

Having identified a project goal and an approach to meeting it, planners must explore who else may be impacted if the desired outcomes are met. Beginning with an exhaustive list of stakeholders is fairly standard procedure in participatory development projects. While such lists identify stakeholders, they typically focus around the level of intended beneficiaries. Rarely is the stake of decision-makers higher up the chain of command clarified, or how they intend to respond to participatory project outputs. This

reflects an assumption of participation; participants are those at the bottom, those at the top may be stakeholders but are not identified as participants. In the inoculation example, in addition to the population being inoculated, local health workers or traditional healers could have a stake in the project. In the second example, MOA, marketing boards, agricultural colleges and input suppliers might all have a stake in the project if they are expected to cooperate with the new arrangement between primary stakeholders—EOs and farmers.

When and how often stakeholders participate in a project depends upon the form or approach to participation chosen to meet outcomes. Depending on the appropriate approach to participation, stakeholder lists and expectations may be relatively simple to manage. However, as projects adopt more empowering approaches to participation, the stakeholder picture gets more complicated. In cases such as this, stakeholders need to be brought to the table often enough to explore and negotiate expectations. As suggested here, this step should take place early enough in the planning process to let actors identify their stakes, voice their concerns, and speculate about how they might or might not participate.

Stakeholders and their stakes change, often very quickly, and the question needs to be revisited frequently. Identifying stakeholders and their interests and expectations can be a time-consuming process and is best done iteratively. As witnessed in St. Lucia during the first week of the project, MOA personnel had difficulty articulating their range of expectations, yet these did evolve and emerge over time. Greater emphasis on monitoring stakeholders expectation could have benefited both projects.

Numerous expectations from many perspectives affect project development and planning. However, before implementation, time must be devoted to vetting as many stakeholders and their expectations as possible. This does not necessarily mean reaching consensus, it means identifying positions and expectations, in public, so that each group has an *informed idea* of where others want to go. This approach to planning for participation provides a logical entry point for ‘intended beneficiaries’ to join the dialogue and either be informed of, or participate in setting goals.

According to Chambers (1997), Guijt and Shah (1998), and Slocum and Thomas-Slayter (1995), participation will affect the balance of power. The process of identifying stakeholder expectations and roles presented here is predicated on the willingness of the more powerful to negotiate power sharing with other stakeholders, and on the less powerful accepting increased responsibilities and accountability for their actions. As envisioned here, this step is where MOAs in St. Lucia and Dominica would have expressed their constraints in terms of inability to create new external markets for produce, or reduce import tariffs on inputs. As participatory projects proceed, they get increasingly complicated. This likely explains why so few participatory projects have been analyzed in depth.

Had MOA personnel in either St. Lucia or Dominica been aware of the kinds of information derived from a PRA, they could have made allowances for getting what they wanted in addition to what emerged from fieldwork. Had the FAO representative realized that report writing by regional extension teams was not possible at the level and pace he expected, he could have redesigned reporting requirements, and so on.

Having determined *why* participation, *what kind*, and *who* participates, the last step in the process is determining *how* stakeholders should participate to meet stated goals. This phase represents project implementation and consists of delineating activities to be undertaken by stakeholders. Again, the focus must remain on the target outcomes of the project, and proceed according the appropriate approach to participation chosen by project planners and agreed upon by stakeholders. By this point, all stakeholders, and particularly those considered primary actors like EOs and farmers must know where their efforts are expected to lead.

Development resources are limited, participatory projects can be expensive to implement, and participants' time is valuable and should not be wasted. While every situation is different, the four-step checklist (*why, what kind, who, and how?*) for incorporating participation is simple enough to be used as a planning process, to diagnose when, where and why conflict might happen due to off-setting expectations, or evaluate a project after the fact. The key to the process, and to incorporating participation in general is asking the right people the right questions at the right time, and listening to their answers.

Chapters 4 and 5 incorporated elements of the MERGE framework into analyzing both context and process of the two study projects. The rationale behind the choice of this particular theoretical framework reflects recognition of the influence of multiple factors on the delivery and outcomes of the projects. Had consultants used the MERGE framework in planning either project, they may have realized how significantly historical and external factors influenced possible outcomes.

Participation has not disappeared from the development agenda, and if anything has expanded from agricultural and conservation efforts to public health, adult education, and urban-based community development. As such, there are entire sectors that need to be explored in relation to the effects of and intent to increasing stakeholder participation. The combination of frameworks used in this study and the checklist for incorporating participation that emerged from it, proved useful for exploring these particular cases. Further research could assess the utility of this combination of frameworks for planning, diagnosing and evaluating participation in other settings. While acknowledging that there is no recipe for 'getting participation right,' and that every situation is different, those responsible for incorporating and implementing participation in development should equip themselves with every tool possible for taking advantage of the opportunity to engage stakeholders in identifying, analyzing, and addressing their own needs.

APPENDIX A
DATA PERTAINING TO PRA IN ST. LUCIA AND DOMINICA

ST. LUCIA

Project Team Deliverables to FAO.

- 1) Spring, A., Sullivan, A., Litow, P., & Barham, J. (2000). *Training Manual on Training in Participatory Rural Appraisal for Frontline Extension Officers*. Training Program, May 31 - June 6, Castries, St. Lucia.

Spring, A., Sullivan, A., & Litow (2000). Synthesis of Eight Regional PRAs in St. Lucia, May 30 – August 2, 2000. 43 pages.

Spring, A., Sullivan, A., & Litow (2000). Strategies to Incorporate the Main Findings and Guidelines for the Advancement of the Rural and Agricultural Sector in St. Lucia. 20 pages.

Spring, A., Sullivan, A., & Litow (2000). Strategies for Strengthening the Extension Delivery System. 13 pages.

Spring, A., Sullivan, A., & Litow (2000). Methodology, Planning and Execution of the Participatory Rural Appraisal (PRA) in St. Lucia: May – August 2000. 11 pages.

Sullivan, A., Litow, P. & Spring, A. (2000). Eight regional PRA Reports.

Additional Project Related Documents.

Food and Agricultural Organization of the United Nations. (1999). *Introduction and Adoption of Participatory Approaches and Methodologies for Strengthening the Agricultural Extension Service in St. Lucia*. Project Plan. TCP/STL/8921(A).

Food and Agricultural Organization of the United Nations. (2000). *Introduction and Adoption of Participatory Approaches and Methodologies for Strengthening the Agricultural Extension Service in St. Lucia*. Letter of Agreement. TCP/STL/8921(A).

Meliczek, H. (2000). Report on consultancy mission of rural organizations. TCP/STL/8921. December 2000. Submitted to FAO.

- Meliczek, H. (2001). Rehabilitation and strengthening of agricultural production and support systems for achieving food security in Grenada. Participation in demonstration plots. Mission report. April 2001. TCP/GRN/0065 (A).
- Project Management Committee. (2000). Minutes of the project management committee meeting, Castries, St. Lucia. May 17, 2000.
- Fax related to questions of sample size for proposed PRA. From FAO representative to team leader. May 8, 2000.
- Spring, A. (2000). *Proposal for Three Month PRA in St. Lucia*. Unpublished manuscript, Gainesville, FL.
- Sullivan, A. (2000). Summary Report of the 5-Day Training Program. 4 pages.
- Sullivan, A. (2000). Progress Report on round one PRA in St. Lucia. July 23, 2000. 3 pages.
- Memo on PRA process, rationale for proposed change in PRA schedule. June 19. Distributed to MOA, EOs, FAO.
- Upton, M. (2001). Production analysis and farm management. Report of consultancy mission, St. Lucia. TCP/STL/8921. January 2001.
- Upton, M. (2001). Report of the second consultancy mission on production analysis and farm management. April 2001. Submitted to FAO.
- Upton, M. (2001). Farm management handbook for St. Lucia (first draft). April 2001. Prepared by the FAO Extension project, St. Lucia. Submitted to FAO.

Other data sources:

- Office and field notes covering May 22 through August 24, 2000.
- Personal calendar, 2000.
- Project calendars: proposed and as executed.
- List of participants in training program

Electronic Files:

- Contractual Services Agreement. TCP/STL/8921 (A). "Strengthening the Delivery of Agricultural Extension Services in Saint Lucia"
- Complete training manual, training design, and session plans.
- Spreadsheets for each regional PRA, round one and round two outputs.
- Monthly PRA schedules: June, July, and August 2000.
- Instructions to EOs for PRA procedures: rounds one and two
- Sample data collection tools for individual farmer interviews and focus groups.
- Instructions to EOs for incorporating round two data into regional reports.
- Guidelines for regional presentations at final workshop

Programme for final workshop
 Provisional programme for final workshop
 Data derived from final workshop activities
 Presentation of Policy Implications of PRA in St. Lucia by Chief Agricultural Planning
 Officer at final workshop
 Consultants' final workshop presentation

DOMINICA

Project Team Deliverables to FAO.

- Barham, J. & Sullivan, A. (2002). PRA Field Manual: Strengthening Extension Delivery in Dominica. April 2002. 77 pages.
- Sullivan, A. & Barham, J. (2002). Four Regional PRA Profiles.
- Sullivan, A. & Barham, J. (2002). Interim Report on PRA Findings in Dominica. 29 pages.
- Sullivan, A. & Barham, J. (2002). Strategies for Strengthening Extension Delivery Systems in Dominica. 7 pages.
- Sullivan, A. & Barham, J. (2002). Methodology and Strategic Recommendations. 7 pages.

Additional Project Related Documents.

- Food and Agricultural Organization of the United Nations. (2001). *Introduction and Adoption of Participatory Approaches and Methodologies for Strengthening the Agricultural Extension Service in Dominica*. Project Plan. TCP/DML/0166(T).
- Food and Agricultural Organization of the United Nations. (2002). *Introduction and Adoption of Participatory Approaches and Methodologies for Strengthening the Agricultural Extension Service in Dominica*. Letter of Agreement. TCP/DML/0166(T).
- Sullivan, A. & Barham, J. (2002). Report on 5-Day Training: La Plaine Agricultural Training Center. Dominica.
- Sullivan, A. & Barham, J. (2002). Report on Round One of the PRA. March 25, 2002.

Other data sources:

Project planning notes covering January 15 through February 15, 2002.

Office and field notes covering February 17 through April 26, 2002.

Personal calendar, 2002.

Project calendars: proposed and as executed.

List of participants in training program

Electronic Files:

Letter of Agreement: Provision of funds from the Food and Agriculture Organization of the United Nations to the Research and Graduates Programs, University of Florida.

Notes from telephone conversations with FAO representative beginning July 12, 2001 through project completion.

E-mail correspondence with FAO representative beginning August 7, 2001.

Proposed schedule for first week in Dominica, consultants' expectations.

Ten week plan for PRA in Dominica

Outline of reports due to FAO at project completion, February 15, 2002.

Training design, session plans, trainers' notes, participant evaluation.

Weekly reports on PRA activities to MOA personnel and FAO representative.

Master matrix of data compiled through fieldwork in Dominica.

Agendas for final workshop

Consultants' presentation at final workshop

APPENDIX B
FAO SCHEDULE OF ACTIVITIES

ACTIVITY SCHEDULE (Months)

ACTIVITIES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	PERSONS RESPONSIBLE
Staff/Farmer Train.: Farm Bus. Mgmt/Market.																			Consul., T.O/Ext., P.Os
Design of System – Production & Marketing Databases																			Consul., P.Os, EOs
Staff Train. Collect. & Use of Prod. & Market. Databases																			Consul., P.Os, EOs
Consult.-Computer program/training																			Consul., P.Os
Consult. -Ext. Org. & Mgmt: training/fieldwork																			Consul., P.Os
Prod. of Ext. Prog. Manual/Guide lines																			Consul., NPC, T.O/Ext
Design of job descriptions																			Consul., D/MOA, T.O/Ext
Prep of production guides-priority crops																			Consul., Agr./Ph., P.Os
System for Recording farmer production profiles																			Consul., P.Os, EOs
Consult.-Ext. Support Services & Field/farmer training: Training																			Consul., NPC, P.Os
Physical plan for Farmer training																			NPC, P.Os
Prep. of environmental checklist																			SL Ext., NPC
Finalization of LOA with MOA																			SL Ext., NPC
Preparation of final report																			SL Ext., NPC

NPC: National Project Coordinator
 PMC: Project Management Committee
 P.Os: Project Officers
 D/MOA: Director, Ministry of Agriculture
 ATS: Advisory Technical Services

T.O./Ext: Technical Officer, Extension
 SL Ext: SLAC Extension Officer
 Consul: Consultants
 E.O.: Extension Officer
 Agr./Ph.: Agronomist/Post-harvest Technologist

ACTIVITY SCHEDULE (Months)

ACTIVITIES	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	PERSONS RESPONSIBLE
Appointment of NPC & Assignment of POs																			D/MOA
Project Planning Workshop																			NPC, SL, Ext
Establishment of PMC																			D/MOA, NPC
PRA Consult. Training & Survey																			Consul., NPC, P.Os
Gender Analysis Training (re: PRA)																			Consul., NPC, SL, Ext.
STS-SLAC Technical B/Stopping Selection of Priority Crops																			SL, Ext
Production Analysis—Priority Crops																			D/MOA, Agr./Ph., T.O/Ext
Procurement of Equip., Materials, Supplies																			Consul., Agr./Ph., P.Os
ATS for Group-based Extension Staff/Farmer Train, Group-based ext.																			SLAC, NPC
Group form./maint/methods, etc.																			SL, Ext, NPC
ATS for Farm Bus. Mngt./Market/																			Consul., T.O/Ext., P.Os
																			SL, Ext., NCP

NPC:

National Project Coordinator

PMC:

Project Management Committee

P.Os:

Project Officers

D/MOA:

Director, Ministry of Agriculture

ATS:

Advisory Technical Services

T.O./Ext:

Technical Officer, Extension

SL, Ext:

SLAC Extension Officer

Consul:

Consultants

E.O.:

Extension Officer

Agr./Ph.:

Agronomist/Post-harvest Technologist

APPENDIX C
REGIONAL REPORTING OUTLINE

Regional PRA Report Outline: St. Lucia
After first round of PRAs

- I. Introduction: PRA Activities—When, Where, Who, What, Why?
 - II. Project Objectives, Timeline, and Methodologies (PRA team will write this)
- III. Regional Ecosystems and Population
 - Site-specific ecosystems
 - Site-specific populations
- IV. Stakeholders Involved in PRA in the Region
- V. Enterprise System Types: Livelihood Enterprises and Strategies of Farmers in the Region.
 - Enterprises by Type of System
 - Enterprises by Geographical Segments (Which system types are where?)
- VI. Farming Activities and Diversification
 - Nature of Activities
 - Division of Labour
 - Resource Access, Control, and Benefits
- VII. Farmer Constraints and Problems
 - Farmer Attitudes and Perceptions of Extension
 - Farmer Identified Constraints, Problems, Solutions, Suggestions
 - Potential Opportunities for Diversification
 - Extension-Identified Constraints and Problems
- VIII. Extension Potential to Respond to Farmer Constraints and Problems
 - Possible Actions
 - Demonstration Plots (Where? For Whom?)
 - Further Training Needed (For Extension Officers and/or Farmers)
- IX. Monitoring and Evaluation
 - Monitoring Plans (Matrix?)
 - Evaluation Plans
- X. Policy Implications and Recommendations
 - Recommendations

Regional Report Outline—Dominica PRA

- I. Overall Description of the Region
- II. Demographic and Socio-economic Conditions
- III. Agriculture
 - A. Historical Trends in Agricultural Production
 - B. Current Production Practices
 - a. Production System Types
 - b. Major Crops Grown
 - i. Production Practices
 - ii. Production Scheduling
 - iii. Access to and situation of markets
 - iv. Labour availability, usage, seasonality, cost, quality, etc.
 - c. Major Production (on-farm) Issues/Problems
example: pest and disease, technology gaps
 - d. Major Production (institutional) Issues/Problems
example: land tenure, credit, farm access, etc.
 - e. Farmer identified problems with their corresponding constraints and causes.
 - f. Farmer and Extension proposed solutions
 - C. Critical issues, including technical observations, not addressed during the PRA .
 - a. Consideration of past national programmes (for example Diversification).
How have they impacted regional farmers?
 - D. Focus areas for future action by regional extension team.
 - a. Select and prioritize **technical areas** to be addressed by regional teams
(for example, specific crops, marketing assistance, strengthening groups)
 - b. Where will these actions take place?
 - c. Numbers of target audience (GENDER)
 - d. Group Formation (potential number of groups to be formed or strengthened,
possible location and purpose)
 - E. On-farm demonstrations/trials
 - a. List subject specific areas for demonstration
 - b. Estimated number of participants (gender specific targets)
 - c. Potential site(s) for demonstrations
- F. Learning Needs Assessment of Farmers: what is the current Knowledge, Attitudes, and Practices of farmers?
 - G. Regional gender considerations and plans of action that ensure that gender is included in work programmes, group formation, establishment of demonstrations/trials, future trainings.
 - H. How regional extension teams would like to reposition themselves to respond and assist farmers more effectively in the future.

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BIOGRAPHICAL SKETCH

Amy Sullivan was born and raised in northwestern Connecticut. She completed a bachelor's degree in political science at Keene State College in Keene, New Hampshire, in 1989. In 1994, she joined the Peace Corps and worked in Senegal, West Africa, as an agricultural extension agent for over two years. She returned to Senegal in 1997 to train incoming Peace Corps volunteers in agricultural extension. Upon returning to the United States in 1997, she entered the master's program in farming systems research and extension with the Department of Agricultural Education and Communication at the University of Florida in Gainesville. Ms. Sullivan received her Masters of Science degree in Agricultural Education and Communication in May 2000.

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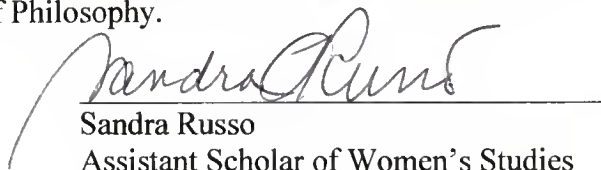
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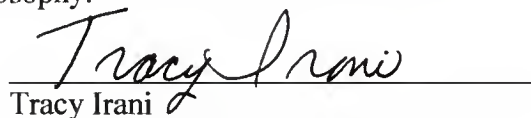
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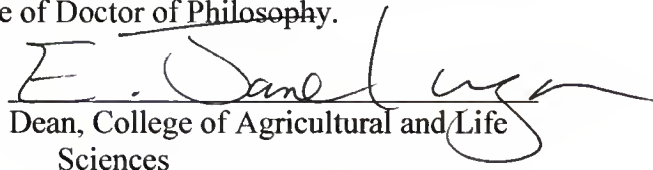
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